THE UNIVERSITY IN OVERALLS

A Plea for Part-Time Study

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Booklets on Frontier Problems, Etc.

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TO
MY BROTHER
TOM

WHO DID TOO MUCH MANUAL LABOR
WHILE I DID TOO LITTLE

"The miserable fraction of science which our united mankind, in a wide universe of Nescience, has acquired: why is not this, with all diligence, imparted to all?"

—THOMAS CARLYLE.

PREFACE

The greatest educational problem of Canada is how to enable the multitude of manual and other workers to avail themselves of higher education. Their right to the privileges of secondary and university education is now everywhere admitted.

Taking the provinces of Canada—with the exception of Prince Edward Island—which does not supply the figures—it may be shown that not more than eighteen per cent of the pupils who enter the elementary schools of the country pass on to the secondary schools and preparatory colleges. The percentage varies in the different provinces, with Nova Scotia, Ontario and British Columbia leading, followed by the three prairie provinces, Quebec, and New Brunswick. In other words over 80 per cent of the pupils of the elementary schools of the Dominion go out into the world without higher education of any kind.

Very much less is the percentage who reach the universities. The population of Canada is 9,000,000 approximately, yet the total number of students attending our universities is slightly under 21,000. It has been said that not five per cent of the people in the Dominion have a university training, while the number passing directly each year from the elementary schools, through the

secondary schools and on to the university is less than one-half of one per cent.

This condition should not be. It constitutes a serious problem. Of the few who are thus able to avail themselves of the opportunities of fuller knowledge, how very small in turn is the proportion who come from the families of the wage earners.

Why is it that higher education is denied to the vast majority of manual workers of the Dominion? The employees in the following specified industries for Canada in 1917 were as follows:

INDUSTRY.	Males. Employed.	Females.
Lumbering, 1917	54,676	nil
Mining, 1918	51,150	nil
Fishing, 1918	82,070	5,000
Dairying, 1918	19,155	Practically nil
Manufacturing, exclusive of dairying, fishing and lumber industry, 1917	499,586	137,805
Agriculture, 1911	933,735	.....
Persons engaged in trade and merchandizing, 1911	283,087	.....
In building trades, 1911	246,201	.....
	2,160,660	142,805
	142,805	
Total	2,303,465	

Considerably more than two million workers throughout the Dominion are thus engaged in industrial and mercantile employments as city workers, as agriculturists, and as frontiersmen. What proportion of these workers

have even the opportunity to take advantage of university training?

This book is intended as an appeal for increased efforts toward extending the university to all. It is vital that higher education be brought to the masses. This can be done only by the decentralization of all our systems of education. Teachers and taught must be brought together. Classes must be held, not only in the schools and universities, but in the shops, on the works, in the camps and fields and settlements of the frontier.

That many of the universities are now giving extra-mural courses and lectures is one of the most encouraging signs of the times. Their action is a recognition of the need, although as yet they do not go far enough. It is necessary to establish a continuous contact between the workers and the universities as well as the technical schools. This can be done only by resident professors assisted by lecturers, demonstrators and tutors, many of whom may be students themselves, working toward a degree.

The problem of extending educational facilities to works, mills, and camps can be solved. For twenty years the Frontier College has made practical efforts to apply these principles. Its instructors have demonstrated the practicability of university training beyond school and college walls. Its operations have been carried on in remote places, with the woodman, the miner, the navvy and the fisherman, as well as at the industrial plants and settle-

ments. It has proven that success will follow the effort to carry direct instruction to the workers when with the tact and sympathetic personality of the instructor is combined a suitable environment and a reasonable day's work.

During these years the Frontier College has had the kindly co-operation of not a few employers, contractors and foremen. Its task has been assured. More than ever in future endeavor we set confidently before us the motto:

> "Education to all workers.
> Every outpost and every settlement, camp and factory, must be manned with well-qualified instructors."

Acknowledgment is gratefully given by the writer to William Houston, M.A., of this city for thoughtful care and attention in reading the proofs; his ripe knowledge and unfailing courtesy have so often put me under obligation to him. From S. Roy Weaver, M.A., Toronto, a former instructor and Professor James Hutcheon, Meadville College, Penn., I have received valuable criticism. Particularly am I indebted to my colleague E. W. Bradwin, M.A., whose close contact through many years with camp life in Canada, and whose knowledge of frontier conditions has been the source of much help and many practical suggestions.

ALFRED FITZPATRICK

Toronto, Ont., 1920.

INTRODUCTION

The history of the Frontier College is a good example of the development of a Canadian pioneer educational venture founded upon a clean-cut idea—close personal association of the instructor with his pupils. He must be one of them in their daily occupations. It follows that he is their associate in their spare hours. To this has always been added another sound educational method—studying the individual interests of the men.

In "The University in Overalls," Mr. Fitzpatrick puts his finger upon the weak spot in all our schools—up to and including the universities—the failure to study the actual conditions of life, the needs, the interests, and the capacities of the students, and the consequent frequent mistakes in the choice of subject-matter and methods of instruction. And so it comes about that our schools, colleges, and universities are to a great extent out of touch with the active life of the great body of the people. This has far-reaching results, and is intimately connected with the present condition of unrest. The right kind of education will go far to reconcile the elements of strife and discord with which modern society is tormented. To the universities the book brings a distinct message, asking them to relate themselves more closely to the men and women in field, camp, and factory. To the leaders in

industries the message is equally clear and insistent. The conference in Winnipeg last summer and the work of the education committees of the Canadian Mining Institute, the Pulp and Paper Association, and other organizations, are encouraging signs. There is a good deal of leeway to make up, and one of the best chances for this is to be found in mining and lumber camps and in other communities where large numbers of men and women are working in close association. Universities, captains of industry, labor organizations, and education departments should unite in the support of this pioneer educational enterprise.

W. L. GOODWIN.

Queen's University, Kingston, March, 1920.

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THE UNIVERSITY IN OVERALLS

CHAPTER I.

THE BUNKHOUSE AND CAMP MEN.

Lumbering has been a basic industry in Canada for more than a hundred years. The lumber camp, with its community of buildings, has been a familiar sight in many parts of the country for whole generations. From the earliest time in the life of the provinces, when selected pieces of squared timber were first assembled at Quebec for export, down through the decades of the succeeding century, even until the present, the hardy men of the woods and the "shanties" have been everywhere in evidence leading their nomadic, picturesque existence.

The St. Lawrence and the Ottawa areas have been logged these seventy years; Muskoka and the Georgian Bay and later the North Shore have been denuded of their pine; but lumbering is still a vast industry throughout the Dominion. In the older parts, even in New Brunswick, many companies are still operating on a large

scale, while hundreds of new pulp camps dot the northern parts of Ontario and Quebec. Manitoba, Saskatchewan and Alberta, too, have great areas of good bush land in the north, now being opened. These share with the big timber of the Coast in keeping lumbering well to the front among the industries of Canada.

In the many changes which have necessarily accompanied progress and development in Canada perhaps no other industry has shown itself so conservative as lumbering. True, mills have been improved; the preparation and supply of food have undergone a radical change since the days of the open camboose. The semblance of a medical system has been inaugurated. Even the methods of lumbering have been almost revolutionized, especially where machinery plays such a part as it does among the giant trees of the Pacific coast. On the other hand the system of housing the men of the camps, in the vast majority of cases, has remained but little altered. There are lumber camps in the Cobalt country to-day the exact replicas of camps built on the Madawaska in the seventies. In the woods north of Battleford, Saskatchewan, are sets of camps that might just as well have served their purpose in Muskoka forty years before. Camp after camp we find the same: the shore of a lake or river lined with the cookery, the blacksmith shop, the stables and supply barn, the bunkhouse, and the stores' shed. There may be another building or two for a local purpose, but these

The Forest Village—A General View of a Bush Camp.

(Facing page 2.)

comprise the main buildings of a logging camp wherever situated.

Lumbering no longer enjoys the relative position it once held in Canada. All dwellers in camps to-day are not confined to the men engaged in lumbering. Railway development has made great strides in the provinces of Canada. Since Confederation nearly forty thousand miles of new road have been laid, great stretches of which have passed through lands practically uninhabited. This has compelled many thousands on railway construction work to live much of their time in camps. Mining, too, in Canada has received an impetus in the last thirty years, and here again we find the men engaged in development work often living in camps. Besides, development plants for Hydro enterprises and other material works have often compelled the housing of workmen in isolated camps. Camps will continue to play a great part in the daily life of many Canadians for generations. Camps in Canada have been too long patterned on the old style "logging camps." Whatever merit they ever possessed is more than offset to-day by positive disadvantages.

Of the various frontier camps the make-up of the lumber camp is perhaps the most permanent. Here the men come with the idea of spending from six to seven months. They are more settled, and "jumping" is not so common, especially in the early part of the winter. The camps are miles distant from the nearest town or hamlet, and

the men are thrown more upon their own resources for whole weeks and months. In touch with the outside world only by the long, tortuous tote road, this little community, its buildings crowding the edge of some lake or river, lives all undisturbed, a working village of from sixty to one hundred and thirty men, which would equal in virility a village of 1,000 people elsewhere.

Construction camps, lining at intervals the right of way of a railway-in-making, are less stable in character than the bush camps. They are not so isolated. Daily in touch with one another by means of the tote-teams and the constant flow of activity pervading the whole line of construction, they are less self-contained, and the men "jump" quite freely. The time-and-a-half and double time offered for extra work in spare hours, induce the men to work long days. There may be bigger pay, but there is more coming-and-going. The summer months, too, have their drawbacks for work in camps. The intolerable heat, the pestilent mosquitoes, and the black flies, all add to the annoyances of life in a summer camp on construction. The bush camp may be taken as a fair index of the daily life of a frontiersman.

The bunkhouse shares with the cookery in being the chief scene of the activities when the men are around the camp. The average bunkhouse is a building about thirty feet by fifty-two feet, intended, when full, to accommodate from 80 to over a hundred men. If a camp contains

130 men or more, two bunkhouses are often erected, a little smaller in size, but with bunks still of a uniform width about 4½ feet by 6 feet 3 inches, and while the number of bunkhouses may be increased, the actual size of a bunk seldom varies. Bunkhouses have low walls and a low pitched roof, lined with tarred or felt paper. They are usually kept in good repair, and until near the close of a season, the bunkhouse is always kept dry.

Large stoves and plenty of wood near at hand provide the heat. When the men come into camp after their day's work, their clothes are hung above the stoves, on all sorts of improvised carriers. With the wet, or snow, and perspiration of the men, these garments are soon steaming above the heated stoves, and long before midnight, the oft-breathed air has a rancid smell. Even toward morning when the fires have died down the air of the crowded sleep camp is thick and heavy. If one were to step in from the open air the odor of the place invariably would remind him of Stevenson's sentence in Treasure Island: "If ever a man smelt fever and dysentery, it was in that abominable anchorage." It is the crowded conditions of bunkhouses which are their weakness. There is no privacy in the bunkhouse, and the occupant longs in vain for a chance to get a good bath.

These camp men suffer not only from the physical discomforts of the bunkhouse, but also from the deaden-

ing monotony of camp life, the absence of culture, or of any refining and elevating influences. The social life of the camp is confined to the evening chat with its retold yarns, a quiet smoke, a game of poker with tobacco plugs as stakes, the occasional song, or perhaps some music from the camp musician. Sunday generally marks a long, heavy, sleepy period with none of the activities of other days to enliven it. When good amusements fail, bad ones inevitably arise, and the amusements of a people have more to do with their morals and their efficiency than most of us think. The monotony of life, especially among young people, causes more crime than does original sin. Men whose spare time is occupied in gambling, drinking, listening to or partaking in the low jest, song, and story, soon become depraved. They are then ready to "jump-camp" at any suggestion, no matter how vulgar, that promises even temporary relief from such environment.

They are subject, too, to all the diseases peculiar to unsanitary conditions, in the undeveloped districts. While there are plenty of sanitary regulations, there is only a lackadaisical government inspection to enforce them. In the light of modern scientific discovery this neglect is criminal. That persistent rheumatism, those prematurely grey hairs, that old expression on many young and kindly faces, tell plainly that life in the forest is a warfare from whose battles few return unscathed. If uninjured in body they will probably bear scars on their

Interior of Old-Time Bunkhouse.

(Facing page 7.)

souls, for they are invariably weakened morally by the isolation and neglect.

It is admitted on all hands that as long as one class of men do the rough, often unpleasant, and dangerous work of the country, they should have at least comfortable, sanitary and commodious quarters, and a modicum of social activity. This much is necessary to the maintenance of their moral and spiritual life. The urgent need, not only of bright and capacious sleeping quarters, but also of rooms for healthful, social and intellectual culture and public worship cannot be over-estimated. Certainly in the case of men who sacrifice home and the fellowship of friends to do such dangerous and often uncongenial work as river driving, the felling of trees, and the blasting of rock in mines and railway cuttings—works so essential for the progress of our country—there is no excuse for confining them in the physically wretched quarters, which have too long prevailed.

Bunkhouse men ought to be among the healthiest and best in the whole country. Their work is largely in the open, and often of a nature that brings every muscle into action. Given as good sanitary conditions, educational, social, and religious privileges, they would naturally be the best class in the community, while as a matter of fact they are amongst the worst and most illiterate.

Were it not for nature's warning in the form of an outbreak of smallpox, diphtheria, or typhoid, and the conse-

quent fear of an undertow that might endanger themselves, bunkhouse men might "go to the devil" for all the interest a large section of the people take in the housing and sanitation of the camps.

Why is it that smallpox and other plagues are not more common in camps? Because these men are usually in their prime. Their physical strength, too, reflects the many hours spent in the fresh air in healthy work and they have always abundance of good strong food. But let a man remain in a bunkhouse for a few days, deprived of the compensating oxygen of work in the woods, and he will at once feel the depressing effect of the bunkhouse.

There are other dangers that arise from housing men in cramped and filthy quarters. Moral diseases, which, alas, are also infectious and contagious, and which are the result of this lack of social and religious restraint, are of a much more serious character. No one knows these evils better than those who suffer from them, but their characters are so weakened by solitude, by neglect, by *ennui*, by idle, sensual and vicious thoughts, that they lose their self-respect; they sell their birthright for a mess of pottage. To use an expression of George Adam Smith: "Their characters are unfenced."

To neglect the opportunity to surround these men with home-like influences, and with the tools with which to mould and fashion their characters, is to leave them open

to every evil influence. It is to allow their minds to be full of thoughts that sap their manhood. It begets the spirit of Herod, the spirit that massacred the innocents. It makes such men reckless of the responsibilities of home and they long only for evanescent pleasures without the sanctity, the joys, and sorrows that make home worth while. Their minds become the charnel houses of thoughts that eat out the vitals of their better selves. Instead, give place in their lives to the visions and dreams suggested by a perusal of the works of our great authors, Isaiah, Paul, Shakespeare, Carlyle, and Emerson.

The bunkhouse is a curse to the inmates, to the employer often, and to the public generally. Why should young lads with comparatively clean minds be tumbled promiscuously into bunks with filthy-minded men?

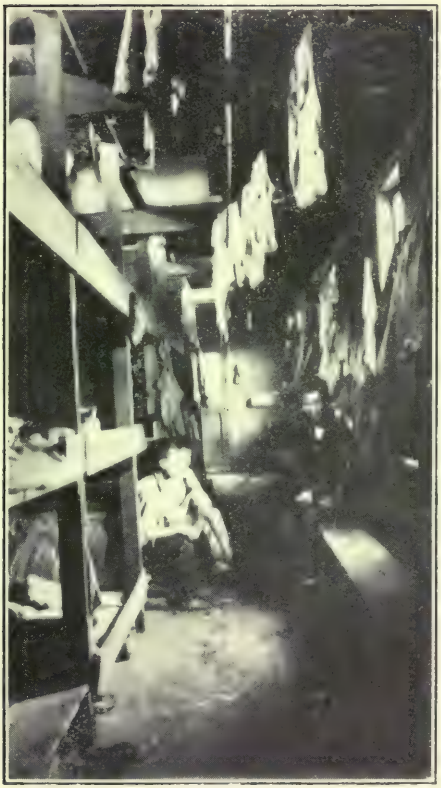
After all, the camp man is human. He is a man in the making. Why not treat him as a man, house him as a man should be housed, and give him room to grow? Generally speaking the principle of sleeping in the same room with another is bad. No commercial traveller, indeed no lumberman, no contractor, or other self-respecting Canadian citizen, is willing to be tossed bunkhouse style into a bed with a stranger, even if the bed is of down, and the stranger clean.

One of the benefits to be derived from the training which so many camp men have had overseas will be a

higher regard for the exercise of sanitation in camps. The camp man who as a soldier has learned in a hard school the deadly danger of filth in proximity to humans and their food, is not going to submit so readily to the conditions which formerly existed in frontier camps, not only in the latrines and rough closets, but in the crowded sleeping quarters. Adequate preventive measures will be demanded, as a protection to the men, against the countless flies and mosquitoes, which are present through the livelong summer, and though only to return instantly, are brushed aside often with a curse. This at least has the war taught thousands of camp men.

It is a safe assertion that very few Canadians realize the debt which this country owes to the men in the camp. The works of such writers as Doctor Drummond, Stewart Edward White and "Ralph Connor" have thrown a certain glamor around the life of the lumber-jack and river-driver, but the commercial value of these men to the country is seldom considered. Just as surely, however, as the foundation of England's trade and commerce was laid by the gallant seamen who served under Hawkins and Drake, so the basis of this country's financial prosperity has been firmly set by those daring sons of the frontier represented by Macdonald Ban and Johnny Courteau.

We boast of the land of "the peerless pine," and presumably we glory in the sturdy woodmen who brave the



Interior of a Bunk Car.

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northern winters in order that stately trees may become merchantable lumber. Our hopes are centred in the measureless west, where progress is marked by the building of railroads, or in the trackless north, where the mining possibilities are limited only by labor and capital. But who shall build these railroads and exploit these mines? The men in camp, is the reply.

Shanty-men, river-drivers, miners, and navvies have not in the past had "a fair show"; they have been allowed to give but not to take. Until recent years the staple bill of fare for camps was pork and beans—and not the best quality of pork at that. It is not long since it was impossible to get medical treatment on the frontier, even among big gangs; and even now less thought is given to the social welfare of these thousands of our citizens than to any other class of people in the Dominion.

Camp men are surely most deserving at the hands of their fellow-Canadians. Their hardships are as great, and their dangers often as many as accompany military service. Despite this, they lack the inspiration of their country's honor and applause. They never know the stimulus incident to the exploitation of an enemy's country, the stirring of martial music, and the trappings of war. Their isolation is more complete; their life is solitary and humdrum, without change of scene or the incentive of good society. Soldiers are better dressed, move in the best society in the garrison towns, and are

generally stationed in large bodies. Shanty-men and navvies seldom see anyone outside their own camp of from sixty to one hundred men. They receive little attention from the Church, less from the public generally, and, until recently, none from the Government. The army has its surgeons and a hospital staff efficiently organized, a very large percentage of its sick and wounded recover, but until recent years the hospital accommodation for sick and injured frontier workers has been most crude.

One cause of the unrest which fills the camps, both East and West, is due mainly to the lack of suitable accommodation at camp. If the employers were to spend the amount on housing their men that they now spend on employment agencies and on railway fare for men, there would be more contentment among the men. One large lumber company spent $12,000 in two months for railway fares alone. Much of this was lost because of "jumping" on the part of the men as soon as the actual conditions at camp were ascertained. It is a source of regret that the difficulty in getting men compels employers to apply to employment bureaus. The camp man loses his individuality the moment he accepts work from an employment agent, as these agents too often misrepresent facts. Many petty misunderstandings, at the time of hiring, later lead to friction when the men engage in actual work, which culminates in unrest and discontent.

Steps in the right direction. Improved types of Bunkhouses.

Canadian National Lumber Camps, Foleyet, Ont.

Hydro Development Plant, Whirlpool Rapids. Niagara.

Improved Bunk Cars—Merrill and Ring, Pysht, Washington.

(Facing page 12.)

There has been, too, during these many years, a lack of due respect for the rights of the camp men as workers. Not only in lumber camps, but in other frontier works, unreasonably long hours have often been enforced. This may be accomplished in more ways than one. The system of sub-letting petty contracts has often proved but the bait for a form of "sweating"; the men being forced to work unduly in order to make ends meet. To give employers in frontier places too free a hand in determining the conditions of employment is to grant a license often to compel men to work overtime and on Sundays, as well as to live in small and unsanitary quarters. In the cutting of timber, building of railways, mining of ore, and all other semi-public works carried out on the frontiers, the rights of the camp men, as individuals, to conditions such as are calculated to develop self-respect, should be more systematically enforced.

One bright feature of camps is the good food that is usually provided for the men. It is quite true cooks may vary—some good, some only fair, and some not even that—but the material is usually there if it be properly served. Plain, substantial, wholesome food—meats, canned goods, vegetables, dried fruits, bread, and pastry—is there and there in abundance. So far as food is concerned, the ordinary camp is much better than the average boarding house in a large city, notwithstanding that the employer of frontier labor has a much more difficult

task to transport and keep his supplies in good condition than the restaurant keeper or college boarding house.

While lumbermen and frontier contractors have long realized the benefit of wholesome food, and have made commendable efforts in recent years to furnish it in abundance, they have not paid proportionate attention to the housing of their men. Consequently camps of all kinds have been little more than wayside inns, and "jumping" has been the rule rather than the exception.

That reform is needed, employers themselves admit. In fact, the worst criticism of camps that I have heard came from the lips of an employer: "They (the camps) are no fit place for women." It is self-evident that any place on land or sea that is unfit for women is equally unfit for men, either from a moral or sanitary point of view.

It is high time that women should be introduced to all camps and works. A few are there already. There are many occupations in which they can engage, such as laundry, clerical, and culinary tasks, and last, but not least, social and educational duties. The writer knows a lumber company that employs a woman to take charge of the laundry at each of its camps. These positions are so popular that they are contracted for a year ahead.

There is but little doubt that the absence of women from camp life is the greatest of its evils. After a month or two in camp, and especially after several months, men

with whom you get well acquainted will confess to a certain indescribable vacuum in camp life in this respect.

Can you not picture a camp where each single man has a small room to himself, and where he can take a shower bath after work? By reason of single beds being used there is less danger of vermin to worry the man. He gets into his clean clothes after work, hangs up his wet clothes in the dryhouse, and goes out to enjoy that "first-class meal" for which the camp is noted. He eats heavily, for, as Sandy says: "Ye ken, he's nae dining at his ain expense." After supper he goes into the reading room and has some music on the gramophone. At seven o'clock the foreigners and other students assemble for night-school and the government teacher instructs them until eight-thirty. Then all the "bunch" sing songs, or the teacher reels off some first-class views on the screen. Where each married man has his own apartments, there the wife and children help him to live the normal life.

It would be vastly more sensible, humane, and economical for a lumberman to take the whole family than to take the husband only, leaving the wife to care for a baby, shovel snow, and cut ice in the river to water the cow. The wife and baby, yes and the cow too, are all needed at camp, quite as much as the man. Only through the presence of women and children can the single man in camp as well as the husband, be taught the proper way of life. No amount of preaching or teaching will take their place.

The time has come for a change for the better. Palaces are not needed, but the Canadian navvy, lumber-jack, miner, and fisherman should have as good accommodation at least as the engineers on railway construction. Only a short while since, I passed in Western Canada a model camp. High perched above a bend in the river was a neat group of five buildings. It was the headquarters of the divisional engineer on a piece of railway construction. The largest building was the workshop of the engineer and his assistants. There were several sliding windows, all carefully provided with screens. The doors, too, were protected from the flies. Near at hand was a neat two-roomed shack of peeled logs, with a kitchen lean-to. This housed one of the engineers and his young bride, for while women are the exception around ordinary camps, it is not uncommon to have one or two married couples at an engineer's camp. Why? Because living conditions there are invariably homelike, sanitary and comfortable. In this fact lies the solution of the bunkhouse.

To show that forward steps are already being taken in the matter of better housing for camp men, let me describe a modern camp which I have frequently visited, where everything possible is done for the comfort of the workmen. This camp is at Pysht, in the State of Washington. If you look around after dinner you will find that apart from the main building is a meat house which has a

built-in screen on all sides and is excellently ventilated. Cans and other articles are taken out to the woods and dumped over the big trestle. One would search in vain for a fly in the dining-room.

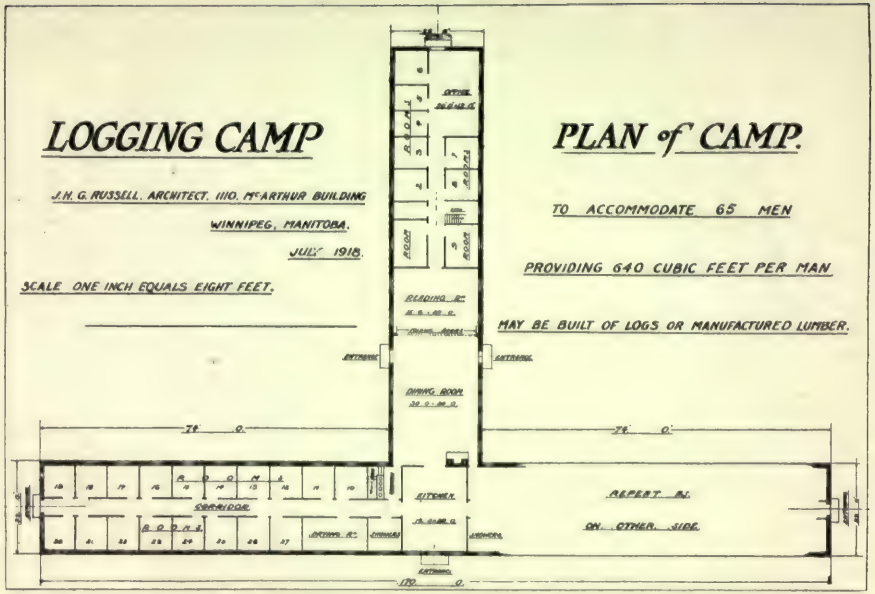
On another side of the quadrangle, at right angles to the cook-house, is another "glass-house," the "bunk-house." The men have gone to work, so now is the time to look it over. In the centre is the sitting room, comfortably fitted up. The noticeable features are a victrola, plenty of reading material, and a large open fireplace, in which if it is the least bit chilly there is a generous fire.

Just back of the main building is a second building, and in this are shower baths, wash room, wash-tubs for clothes, and closets. The sewage system empties into the Pysht River. The fresh water supply comes from some distance up the river and the whole depends upon gravity for its power. The buildings are all lighted by electricity. The houses all belong to the company, and are rented to the men, who have families, at a purely nominal rental: four dollars a month including free lights, water, and fuel. The following, too, is an outline of what may be done with boarding cars, which so often serve to house an extra gang. Can you imagine a row of sleep cars, sixteen steel bunks in each, each bunk having also a separate locker for clothes? In the centre of this row is a car of slightly different design: one half is a wash-room and the other an engine room. Here is the plant which

supplies electric lights, hot and cold water, and steam heat to all the cars. Next to this is a car containing shower baths, and a drying room for clothes. Toward one end of the row is the kitchen-car with two dining cars, one on either side. Provision is also made for a commissariat with a screened meat house, and a school-car with phonograph and plenty of reading material.

Lumbermen, and other large employers of camp men make reply that the temporary nature of the camps does not warrant the expense. But many camps are not temporary. Whole sets of camp buildings do service often for years. They merit more money being spent on fitting them up than has been spent in the past. Men should be given a chance to live and work in decency if even only for one season. A season of seven or eight months is a comparatively long period in the working life of a man. There are at least 3,700 camps in operation in Canada. Of these probably 2,000 last for two years or more. It would be a godsend for approximately 150,000 men who work in them, if they were housed decently, and as well cared for socially as they are fed.

One camp owner replied to the writer's appeal for better housing conditions for his men, to the effect that camp operations were in the nature of emergency work such as war, and that the men in the advanced posts could not expect good housing. The cases are by no means parallel. There is no such feverish haste to



If necessary, additional dormitories could be added to either side of the wing containing the dining and reading rooms. When sawed lumber is used a second story may also be added. Furnace would be in kitchen on the same level as floor.

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destroy our beautiful forests as there was to demolish the German army. Besides, steam heat was usually provided for military training camps, and these were much less permanent than frontier camps. The average life of a bush camp is two-and-a-half years. In all military training camps of even three months' duration the buildings were provided with running hot water for washing and shower baths. There is no reason why every lumber, mining, construction, or fishing camp in Canada should not be supplied with running hot water. In middle and eastern Canada, where ice roads are used for hauling logs, a tank can be filled once a day by the water wagon or oftener, if necessary, with little extra expense or inconvenience.

The law of the Province of Ontario requires that each man be provided with sleeping accommodation of 600 cubic feet. The accompanying sketch provides for 640 cubic feet of space per man with dining room and a general room that would be large enough to serve the combined purpose of reading, instruction, movies, and recreation. A building of this description would, therefore, be suitable for at least 65 men.

Our Canadian camps can be built and heated almost as economically from a one-unit steam plant as by the stove method now employed, even in the case of temporary camps of one year's duration. Most camps that accommodate one hundred men, need approximately twelve

stoves. The time spent in providing wood for these and attending to them is expensive, whereas with a single fire for heating it would be nominal. This one-unit heating plant can be readily removed with minimum loss for further use, when camp operations are transferred to another part of the limit.

Steam heating should take the place of stoves in camps for several reasons: 1. To lessen the danger from fire. The average bunkhouse is a death-trap, heated as it is with a red-hot stove with all kinds of clothes overhanging, and lighted with the aid of the ever-present coal oil can. 2. To provide hot water for laundry and bathing facilities. Not a few mining companies have abolished the bunkhouse, and have introduced steam heating. Why not lumber companies, too? A foreman for a company operating three bush camps, each with one hundred men, is authority for the statement that he could heat and light his camp as economically from a one-unit steam heating plant as he is doing at present by means of stoves and coal oil lamps. Yes, and further, this would furnish not only heat, but also running hot water, in which case plunge or tub baths could be arranged with reasonable expense.

An efficient and well-known heating engineer suggests that the expense might be greatly reduced if steam heating equipment of semi-portable design were utilized. This could be taken down and set

up again with comparative ease and little cost to the company. It gives a maximum of service, for the investment.

In mentioning other factors to be taken into account, he said: "Frost conditions largely determine the character and design of hot water storage and distribution for bathing. Shower-baths are impracticable in camps in severe climates. Plunge or tub baths are better. They can be installed with a minimum of piping, also the bather is submerged and, therefore, not subject to the varying temperatures of the bath-building. The tubs, heaters, and storage tanks can be readily removed and set up again for further use. In this way the capital investment to be written off annually would approximate five or six per cent of the total cost."

Most employers of frontier labor are reasonable men. They will act when convinced. To decide on the course to be taken is not so easy. But courage is in the air these days, and without doubt many courageous employers will shortly step out and wage war on the bunkhouse and its attendant evils, as one of the greatest banes of the camp man's life.

CHAPTER II.

FRONTIER LABOR.

Does the heavy manual work of the frontier camps imply only brute strength? Because a man works with a wheelbarrow, a pick, or a crowbar, must his labor be called unskilled? It is very true that such workers have little college learning, but the college is to be pitied quite as much as the frontier worker, who has a very important kind of education such as few colleges can give.

If you think the work of the navvy, fisherman, lumberjack, or miner is unskilled, try some phase of it for a six-months' period. Get out your daily count of logs in a bush camp on the north shore; go underground in the coal mines of Glace Bay, Pictou, or Drumheller; even tamp ties with an extra gang on a piece of double track where the traffic is heavy. Long before your probation is over you will be convinced of the amount to be learned in these different occupations that so long have been considered as requiring only elbow grease and a dull mind. Knowledge enters into it all; and that same knowledge developed and encouraged in higher efforts may become a power.

Education means the related activity of all the members of the body, by the direction and command of the mind. "All true work," says Carlyle, "is sacred. In all true work, be it but true hand labor, there is some-

An Ideal Lumber Camp.

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thing divine." The human body really does count; a man's hands are as aristocratic as his brain. Too long have these truths been overlooked in our estimation of the work and place of the men in frontier works.

There is need for emphasizing this point: the navvy is learning and has often mastered construction; the lumber-jack, lumbering; the fisherman, fishing; the miner, mining; the factory worker, some phase of manufacturing. They are students in the greatest and most efficient technical schools. There are section foremen, with their crews of six or eight, located at isolated places on the transcontinentals of our two great systems, whose consummate skill and practical efficiency can shame some of the graduates with a special training in science.

In his book on "Hand Work in Wood," Prof. William Moyes, of Columbia University, gives an accurate account of logging operations. This is the first time the subject has been given space in a text book on manual training. It is the first public admission by a prominent educationist that to know how to handle a peavy, break a jam of logs, or make a level main road, is education.

Hurley, in his endeavor to create the shipping promised by the United States to the Allies, was confronted with just this problem:—thousands of trained minds with lack of manual training. Normal Schools were improvised right in the yards. Experts taught these men the use of their hands in skilled trades. Seamen were trained in

nautical exercises who were yet to board their first salt water craft. Thousands of men and boys were sent out from these training centres with head and hand more closely aligned.

Where, too, is better shown the amount of technical knowledge required by so-called unskilled workers, than in spending a few days beyond the steel, where a great new transcontinental is linking up its many sections? Before a hundred miles are traversed, there will have come some dim realization of the extent of scientific knowledge, and amount of mechanical skill required, in order to span a stretch of country with two parallel lines of steel. The traveller will begin to understand that the building of a railway embankment, or the digging and blasting of a rock-cut, involves more labor and hardship than is ever put on record in the Government report, to say nothing of the actual toll paid in workmen's lives. Anyone making such a trip will afterwards implicitly believe that railroad building is an art. The passage over a hundred miles of construction will result in the conviction that Solomon should have sent the sluggard, not to the ant, but to the railway navvy. It must not be forgotten that the hundred and one tasks performed by the so-called "unskilled laborers" are so technical that a "tenderfoot," even though a college graduate, cannot perform them.

The first question a foreman asks an instructor when the latter arrives at camp is "What can you do?" If it

Frontier Labor is skilled labor.

At a logging camp in British Columbia, preparing to hoist the bull-block on a giant spar-tree. "It takes three years to make a good 'faller'."

Machinery plays a growing part in all frontier labor. Novices cannot do this work.

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happens to be on railway construction, he is asked, "Can you plow the grade? Can you 'skin' mules? Can you build a dump?" If the work is more advanced and steel is being laid he would be asked: "Can you buck ties? line track? tamp ties?" Another set of pointed questions would be asked the college man looking for work at a fish camp, a mine, or a pulp mill. Involuntarily the question in the instructor's mind arises: What preparation have my years in the class-room given me for the practical life on the frontier?

How frequently does it occur that college-trained men going as instructors for the first time to a camp, find that the work they had lumped as "unskilled" has characteristics as special as are found in any other industry. Such teachers usually have plenty of keen mental training and the zest for work, but they find that they have much to learn about the standards required of men in frontier works.

The average foreman of a camp, confident in the many years he has given to master the details of frontier work, has an accumulated assurance which looks with scorn on the man who comes with his head well packed, but his hands neglected. He gives the student looking for work about the same answer the registrar of a University would give a navvy or first-class bushman applying for permission to enter without matriculation.

Take a case like this:

Instructor: "Have you work for me at the mine?"

Mine foreman: "What can you do? Have you a trade? Can you run that steam pump? There is a place, too, for a fitter in the machine shop."

Instructor: "I have no trade, but I can keep time."

Mine foreman: "We have our office staff. What we need now, is someone who can use his hands, not a pencil-man."

More than a year ago, when in a logging camp in British Columbia, I asked the foreman to allow me to help cut down a big forest beauty. I had often used an axe and assisted in cutting smaller trees in the East, but never one of the giant firs of the Pacific Coast. His reply, although kindly and well meant, was humiliating. It impressed upon me the one-sidedness of my education. It was in effect: "We are preparing to place one of our donkeys here. There is only one layout for that tree. If it falls anywhere else it will ball up our work. You might even lock it on to the spar-tree. It takes three years to make a good 'faller.' The head 'faller' and I must cut this one. There's too much depending upon it. She must go between that hemlock and the tall spruce." I was a little chagrined, but asked myself: "Are there ten graduates in Arts from any of our Canadian universities who could have helped that foreman to fell that big fir in a space ten feet wide between two other trees?"

Next day was Sunday. In the course of a long walk with the same foreman I found that even he regretted he

did not know more about logging. He expressed the wish, too, that he knew something of geometry, algebra, and even physics. Skilled in one practical line, he saw the need of theoretical training as well.

Hundreds of men are wounded and killed every year because they are not well enough educated in their profession. This foreman realized that a knowledge of physics, hydraulics, and electricity would enable him to handle these forest giants much more skilfully and expeditiously, and with less drudgery, than his limited knowledge had enabled him to do.

Men of this type—and they are legion—should be given instruction at their work and an opportunity to add cultural studies to this technical experience.

It would seem as though the training in many courses of the universities was designed to ignore the need of manual work of any kind; at least any practical knowledge of plain, hard work such as falls to the lot of camp men, must be obtained elsewhere.

A bright university man was located in Saskatchewan a few years ago by the Frontier College. Even his splendid college training did not help him to surmount the barriers of the so-called "unskilled" work, but his previous training as a lad stood him in good stead. After a two-day hike from the end of the steel he arrived at a big grade camp on railway construction, where a considerable number of Italians and Russians were employed.

He sought out the foreman next morning and the following conversation ensued:

Instructor: "I'm an instructor. One of our tents was sent in here two weeks ago with the tote team. I'd like to get work during the day, and I'm ready to teach your men."

Foreman: "What are you, anyway—a teacher, a preacher, or a walking delegate for the I.W.W.?"

Instructor: "I'm a teacher, but I want work as well, during the day."

Foreman: "Were you ever in a camp before? What can you do?"

Instructor: "This is my first break into camps, but I think I can satisfy you. Give me outside work; don't stick me in the cookery. I think I could handle a scraper for you."

Foreman: "I've got a hundred men here already who don't know a plow from a parasol, and I'm not going to hire another. Don't ask me for work. What does a teacher know about camp work?"

Instructor (who had been raised on a farm near Barrie, Ont.): "I can plow anyway. I can handle that team there as well as some of the men you've got."

Foreman (with a new thought): "You can plow?"

Instructor: "I've had more than one summer at it."

Foreman (walking to Italian teamster): "You're better with a shovel on the dump. Drop them lines. I'll try the highbrow."

Foreman (four months later, to a visitor): "The professor's a better man with horses than I am; besides that, he has taught and helped the boys here. We all like him. If a college can turn out all-round men like that, I am for the college every time."

There should be more in common between the product of the universities and the product of the frontier works. They do not sufficiently interact. The mental requirements of one, and the physical barriers of the other do not overlap. Frontier labor should be supplemented more fully by the broader training given in the schools. Proficiency in one direction should imply effectiveness in the other.

About a year ago a bush foreman on the north shore was telling-off his gangs as they passed to work one morning in the late autumn, when the following incident took place:

Foreman: "You're short a man, Billy, in your cutting gang to-day. I'd give you Tom, but I want him to finish at the creek. The teacher's here, take him for a few days."

Billy: "Not on your tin-type. I want no college man with me to fall timber. They are too dense in the head for that work. I'm not risking my life just yet with such likes."

Foreman: "Don't fool yourself. This man can teach all right, but he can cut logs too. I know what I'm doing."

Billy (at night, putting in his count): "108, and big timber, too! Boss, you can keep Tom at the creek; leave the long fellow with me. He knows how to handle an axe, and say, he has a touch on the end of that saw as light as McCormick on his fiddle bow."

This is as it should be. The frontier work will become skilled and professional when more young men of the universities spend a part of their life in the manual work of frontier places.

There is no doubt but that a fair amount of manual labor is good for all of us. The labor of the world is unequally divided. Professional men would be clearer headed, and stronger physically and morally, if they did at least a few hours' manual labor every day. It is by combining the physical, intellectual and spiritual that men grow in perfection. The development of the physical only, may result in a great brute force. This is short-lived; having given his body the ascendancy, he soon degenerates, becomes immoral, and thus saps his mere physical strength. The opposite is equally true. The man who is a mere bookworm, whose mind only is developed, likewise degenerates; his physical powers atrophy, and his sympathies shrivel.

The nature of the labor in which these men of the camps are engaged does not in any way raise a barrier to study. In fact, a moderate amount of such manual toil is the greatest possible aid to it. Happily the exploitation

of our great industries, especially lumbering, necessitates manual labor of a high order. It affords the kind of exercise indulged in by some of our greatest statesmen and scholars. W. E. Gladstone and President Roosevelt made it their pastime. It brings every muscle into play, and that, too, in a pure, outdoor atmosphere, and not in the vitiated air of a workshop or gymnasium. The lack of this training is the great defect in the education of most of us.

We have too long looked uncharitably upon the toiler, who has no mental training, as uneducated. It is high time that we regard the ability to work with the hands as a part of one's education. It requires some skill to use a hoe, more to use a saw, and a great deal to use an axe well. A man who depends upon physical labor for bread must either acquire a little knowledge—enough to use his hands—or starve. The recognition of his ability to work as being part of his education is the first step towards securing the education of the worker's mind and soul. Our conceit in saying that a knowledge of mathematics, law or theology is education, while ability to "fall" a tree, ride and drive a log, or sail a boat is not education, exasperates the frontiersman, and prejudices him against us even when we are animated with the best intentions.

There are two kinds of capital in the world. The one we call property: it consists of lands and machinery, of

stocks and bonds. This kind of capital we are abundantly developing. The other kind is human capital: the character, brains and muscle of the people. Professor Irving Fisher, of Yale University, estimates the human capital, the human resources of the United States, to have a value of 250 billions of dollars. Similarly the flesh and blood resources of the Dominion may be placed at 25 billions. This capital we have not developed, as we should; we have overlooked the whole question of human efficiency.

We have then, in developing the physical resources of our country, done the little thing relatively; it remains now to do the infinitely greater thing. It remains to the teachers of to-morrow to be such, that in their work they will prove to be great creative and administrative forces in the doing of this supremely important thing. Nowhere is such effort more needed than among the men and women of the frontier places and works of Canada.

The kindergarten, manual training, domestic science, and industrial schools, are doing much to overcome this misconception, and to demonstrate that the development of only one side of a man, either the intellectual, spiritual, or physical, is a very poor kind of education. The broadening of the primary and secondary school curriculums to include manual training and continuation industrial courses, is an admission that one's education is not complete without well-trained hands. This recognition that

"The Frontier laborer is often isolated for many months in camps at great distances from the nearest town.

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man is a composite being, and that each part is indispensable to, and of equal importance with, the other parts is a long step toward the dignity of all forms of manual labor, and unmistakable evidence that no toiler whose hands are accustomed to the use of any kind of tools can be said to be ignorant. The reasons in favor of manual training in the schools are the best arguments for culture in the shop, the camp, and on the homestead.

CHAPTER III.

EDUCATION AND THE FRONTIER CAMPS.

The social standards of the times take thought not of what our schools do, but of what they fail to do. They are not unappreciative. They may be over-appreciative—over-appreciative of things undone. With clearer sight they see the waste and wreckage of a system of education which so long has ignored the needs of industrial workers in the factories and camps and on frontier works. Many such places are hives of industry, yet they are deprived of the barest facilities for mental improvement so essential these days for fullest human activity.

The new conception of the State requires that all shall be given reasonable contentment, and that the higher facilities of education be placed within the reach of citizens who hitherto have been abandoned in the lower grades of the schools. Said Solomon: "Wherefore I perceive it is well that a man rejoice in his work, for that is his portion." Joy in work comes from efficiency in one's occupation. We must make intelligently happy every workman, by an industrial education. Such a system, however, must embrace not the urban centres only, but also the workers in frontier camps.

We have made the mistake of educating one class at the expense of another and injuring both. The frontiersman is the brother who is debauched by doing too much of the drudgery for the family, and the college lad is spoiled by being satiated and made effeminate with a one-sided education he has not earned. The latter should be allowed to do part of the work at the camp, on the farm, in the workshop, to relieve his neglected brother, and thus secure for him a little leisure to acquire an education.

There is nothing easier than to find a generous millionaire who is willing to donate a public library bearing his name to some small town. It is often very hard to persuade a public-spirited citizen of ample means to pay the salary of an instructor at some nameless tie-camp on the upper reaches of one of our northern rivers, or to provide for the instruction of navvies at a busy construction camp 60 miles in advance of the steel. It is true such camps are temporary at best, a year or two and they are a thing of the past. Nevertheless the need at such points for an instructor and Canadianizer is often very real.

The young men of our towns and cities are the constant objects of care to philanthropic moral reformers, and thousands of dollars are annually spent in order to provide the leisure hour with means of entertainment and culture. In consideration of this it might be pertinent to ask how many dollars are expended each year for the

benefit of the young men living in frontier camps and what provisions are made for the hour which the lumberjack and navvy may or may not have, for pleasure and recreation?

The crime of robbing, not money alone, but what is worse, character, from these most useful classes, lies at our doors. We appropriate the revenue provided by the toil and sweat, the solitude and demoralization of these men, while at the same time we despise and ostracize them for drunkenness and blasphemy. The wonder is that more of them do not go wrong. Were we also compelled to live as they live, we would not be any better.

The productive value of the mines in Canada, and earning power of the railroads are well known. Yet all this would be largely impossible without the aid of that class represented by the frontier laborer. The man who swings an axe and pulls a saw in the bush, who delves into the bowels of the earth for precious ores, and who labors in the rock-cut and muskeg to build our railways, should reap larger benefits, proportionately, for his work.

As a matter of fact the revenue from these sources is taken to endow public schools, colleges, and libraries, in the older communities, while the greater portion of it is provided by men who reap no benefit whatever. We send sons and daughters to schools and colleges, which are often endowed by the toil of men in conditions so degrading as to lead to the sacrifice of their manhood.

What is needed by these men of the camps, buried socially, intellectually, and morally, is not charity, but more social justice.

It is sometimes asked, why should these men be made the objects of charity? It is we who are the recipients of charity. It is because the much-despised shantyman, miner, and navvy contribute so largely to the production of the public revenue, because their backs are bent, their hands callous, their minds dwarfed, that we are able in many cases to have the advantages of colleges and universities. Look over the files of contributors of the endowments of universities in Canada, and some of the border states of the Republic, and how often huge sums have been donated by men who, while providing for the few, have ignored the living and housing conditions of their own workers in the camps and mills.

The expense of making provision of this kind at every camp in the land is nothing compared with the benefits to be derived by ourselves and those whose wretched condition we try to improve. It will cost the country less to provide bath-rooms, laundries and camp schools than the additional revenue that would be derived. An enlightened and healthy citizenship is a better asset than ignorant and filthy workers.

At present all we ask is that these men have a chance to improve what leisure hours they have. Every laborer has some little time at his disposal. Wonders

have been accomplished with the motto: "No day without a little." The great drawbacks of self-improvement on the part of the frontiersmen are the long hours of labor, overtime, unseemly proximity to one another, the consequent noise and frequent disturbances, badly lighted and ill-ventilated quarters, and the absence of good women, of teachers, literature, works of art, entertainment, and other incentives. It seems incredible, but it is nevertheless true, that contractors and other employers in many kinds of frontier work have practically a free hand in determining how long and in what conditions their fellowmen shall toil. Though the long hours are an evil, the greater evil is idleness when off work. The most urgent need is intellectual occupation and entertainment when not engaged in manual labor. It is the way our hours of leisure are spent, whether as a nation or as individuals, which determines our moral worth.

Let us take one province in the Dominion and look at the claims of these men, not from the point of view of philanthropy or religion, but of cold justice. While Ontario is taken as an example, the same condition may be said to exist in British Columbia, Quebec, and New Brunswick.

In 1910 nearly one-third of the total revenue of the Province of Ontario was derived from the woods, forests, and mines.

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The Frontiers produce much of our wealth. A cut of logs from northern New Brunswick.

Total revenue	$8,891,004
Revenue from woods and forests	1,835,082
Revenue from mines	918,508
Total from woods, forests and mines	$2,753,590

In that year the amount spent by Ontario on education was $2,718,017, almost equal to the amount of revenue derived from the frontier.

But by far the greater part of this was spent in the cities, towns, and other organized districts of the province. The question arises, what outlay was made in the interests of the men who created nearly one-third of this total? A mere bagatelle. Yet in that same year, $520,000 of this money went into the University in Queen's Park. If 5,000 students can be so well provided for—what of the men of Ontario who spend so much of their time in camps? Good radiates from a university in a hundred intangible ways, but still a one-sided deal has too long been handed these manual workers.

Is it fair that the older parts of the province should have such an undue share of the public revenue? Not only do the timber and minerals belong to the province as a whole, but they would be absolutely of no use to the present generation, and would be destroyed by the ravages of time, and fire, were it not that our strongest and bravest young men exploit them. They exploit them

by lives of hardship in rain, and storm, and solitude, by the deadening, unmanning monotony of a mental and spiritual vacuum, and the absence of bathing and other facilities necessary to cleanliness and self-respect. It is true there is a statute in Ontario (1 Ed. VII, cap. 34) providing for bath-rooms at all public works in unorganized districts, but as already pointed out, for lack of interest to enforce it, it is practically a dead letter in all lumber, fishing and railway camps, and in not a few mining camps.

We hear much of the problem of the growth of urban centres at the expense of the rural places. Can it be wondered at, when we see what amounts are spent in the cities of Canada in providing education, religion, and entertainment for those who dwell therein? This is particularly true of western cities: Vancouver, Calgary, Regina, and Winnipeg have made great outlays for the social betterment of their citizens.

Take one city in eastern Canada, as a further example of the expenditures made for the education and social well-being of dwellers in urban centres. In 1910 Toronto had a population of 350,000 or thereabouts. The following tables show the amount spent by Toronto in one year on church, educational, amusement, and charitable purposes.

	Value of Property.	Cost of Maintenance for One Year.
Church Property:		
Total estimated value	$10,000,000	$ 680,000
Charities and Amusements	10,500,000	1,750,000
Educational Property:		
Public schools, separate schools, technical school and libraries	5,470,000	1,631,505
City's estimated share of amount invested in educational property, not exclusively local: The University, McMaster's, Knox, St. Michael's, Victoria, etc	2,133,333	600,000
	$28,103,333	$4,661,505

For the fiscal year ended 31st October, 1918, the total revenue from ordinary receipts for the Province of Ontario was $19,270,123, and the amount fromwoods, forests and mines $2,964,161, or about one-sixth of that total. This proportion is half of that in 1910, but still enough to warrant the expenditure of a large amount on the education of the frontier miner, lumber-jack, settler and navvy.

The total amount spent on education for 1917-18 was $2,799,645, one-sixth of the whole revenue. A fair amount of this annual expenditure on education should be spent on extending school and college privileges to workers.

In 1917 Toronto, with a population of 560,000, had recorded property to the value of $43,901,104, invested in the following:

Colleges	$ 2,344,299
University of Toronto	6,369,801
Libraries	674,082
Public Schools	10,085,260
Separate Schools	774,305
Churches	12,500,000
Theatres and Movies	4,153,427
Philanthropies	7,000,000
Total	$43,901,104

The annual cost of maintenance is more than six million dollars.

Nearly $44,000,000 of an investment and $6,000,000 annually on upkeep for one city! What magnificent results might be expected from a proportionate investment and annual expenditure on the education and entertainment of the frontiersmen.

Tables such as these may be compiled for at least ten other such centres in Canada: some of them with less population, but with proportionate investments for social welfare and educational opportunities.

It is high time that the great resources of nature should be used not to make the few rich, but to make the many wise. The task of the educationists for the next ten years will be to devise ways and means of taking the school and college to the frontiersmen. We cannot educate these manual workers in "an upper ten" or "four

hundred" mould. We must go to them; they will not come to us. We must teach them not only the three R's, and higher learning, but also how to cut trees without destroying the forest, how to stump and till the land scientifically, and how to catch fish in the proper seasons without threatening their extermination—in other words, show them how to wrest a living from Nature without becoming her slave or her destroyer.

The Superintendent of Public Instruction for the State of Nebraska contends that school credits should be given for industrial work done in the home. It is very sensible. Why not extend these credits to industrial operations of all kinds—lumbering, mining, construction and fishing not excepted? Why brand labor of the hands as ignoble by refusing to regard its mastery as education?

Why not dignify and ennoble work by conferring degrees upon successful and skilful toilers when to their technical knowledge and experience is added a knowledge of cultural subjects?

The problem of the frontier is education. We should aim, by means of legislation, at a national minimum of education. This is of vital importance to our young nation.

As to the most practical means of doing this work, it is difficult to dogmatize. A separate building at each camp is in many ways very desirable, if not absolutely

necessary. Resident instruction is certainly needed for the illiterate, and great assistance should be given those taking up extra-mural courses of study. Energetic instructors in the camp would inspire many who are more or less indifferent.

There are a quarter of a million men in the frontier camps of Canada, who spend four hours per day in idleness, to say nothing of Sundays, public holidays and rainy days, an average of at least a million hours every day wasted in absence of occupation.

Most of the English-speaking men in camps are drawn from classes who have left the schools probably before they have reached the fourth book. As youths they have dropped into cursory or blind-alley jobs about the mills or factories. At fifteen or sooner, if able to handle an axe, they drift to the camps. At seventeen, if husky, willing, and able, they are earning a man's pay and things look good. But there they stop. Outside of the small proportion who later become foremen, there is little promotion. Before they have reached thirty they are so circumstanced that they rarely get beyond the humdrum of the bunkhouse.

Of the quarter of a million who may properly be classed as frontier workers in Canada, more than 50 per cent are under 25 years of age. A very large proportion are under 20 years. The writer has been in bunkhouses of 125 men where by actual count only 14 were over 35,

and considerably more than half were under 20. There were youths there from 15 to 20, in the very period of adolescence of mind, when most in need of the school and the university: young men and boys at the critical time of life, when the will asserts itself, and the impulses of maturity are felt. At this period more than at any other the developing character needs guidance and cries out for it: for the establishment of standards, for interpretation, and for the strengthening and development of judgment. After a long period of more or less neglect of camp men we are returning once more to the primal conception of the infinite educational value of labor: of the precious, ordinary, everyday's hard work, which, after all, has made us what we are, and which, combined with education, would mean so much in each secluded camp.

These men are the warp in the social fabric: the "hand-minded," rather than the mental workers. How much of our physical and material progress has depended on them? Yet our present educational system, centring in our universities, so far has ignored the claims—yes, has remained horribly unmindful, perhaps not even informed of the need.

Have our educators been so proud of what was being done in the technical and high schools and universities that these many thousands have been esteemed negligible? If idiots, more concern for them might have been shown. Like the refuse of the mine, the slag of the furnaces, they

have been discarded as bothersome and worth little educational effort. Will the day not come when many a social dump, so long discarded, will be utilized to better the whole life of our young Dominion?

Most people will now admit the general principle that education is for all men, and not for any one privileged class. In the past the tendency has been to educate one class and neglect another as in the ancient Greek state, where ignorant slaves, who, because ignorant, became brutal and vicious, did all the manual labor; while the philosophers had leisure to study and consequently degenerated to mere refined gossips. We have not wholly grown away from these tendencies. The camps of Canada are proof in point.

Provincial Governments have already demonstrated in most of the provinces that short-term classes in mining can be held in camps. But should education be confined to a two week's course, and in technical subjects only?

Evening classes in both technical and general subjects have been a success in cities and towns; why not in camps? They should be even more successfully conducted in isolated localities, where there are no counter attractions to divert the workmen's attention. Why should not our public school and public education systems generally be so amended and enlarged as to include the needs of all who labor with their hands?

CHAPTER IV.

FRONTIER SETTLEMENT AND UNEMPLOYMENT.

Let us turn for a time from the frontier camps and camp men, to consider the needs also of the frontier settlements of Canada. What relation, if any, exists between settlements on the frontier and unemployment in the larger centres.

The undertaking that transcends all others not only in the number and variety of the occupations it affords, but in the number and variety of the direct and indirect benefits it confers upon all classes of our country, is the clearing of the land, and the draining of the muskegs in the great clay belts of northern Canada. The clearing and settlement of the great clay tracts of the Canadian provinces is one of the big needs of the country. Whole areas of New Brunswick, northern Ontario and northern Quebec, as well as the prairie and wooded lands of the West, and the fertile valleys of British Columbia await a definite and systematic policy of development.

"The tools to the man who can use them," said Carlyle. Although the great Scotsman never travelled through the muck west of Cochrane or elsewhere in the vast Hudson

Bay basin, "The Tools" would doubtless also include the soil. The mill of time may turn, and turning, deprive us of these opportunities for development, which have lain so long idle at our doorsteps.

It is plain that the older provinces of Canada will always have an unemployment problem on their hands with congestion in the towns and cities until they develop a more satisfactory homestead policy. In the last hundred years we have made wonderful advances in telegraphy, telephone service, motor transportation, and more recently in aviation—but in the matter of settling a wooded country we have not progressed through this long century, beyond the methods of our sturdy ancestors.

Why not make an organized effort among the citizens to get this land into such a shape that thousands of men, who want to do so, may establish homes and thus be doing something to solve, not only the problem of the unemployed, but the question of living? This is an economic question which the country must solve.

Is it a healthy sign for urban centres to grow at the expense of the rural parts? We have many millions of acres of lands unsettled and apparently no one ready to undertake their settlement.

The problem of the city is the complement of that of the frontier. The city may become the nursing bed of ease, luxury and vice. Its people must be awakened,

its slums depopulated, and unemployment lessened. But how? The city furnishes abundant opportunities for mental, but not enough for physical development. Many dwellers in crowded cities soon become defective physically for lack of regular and remunerative labor of the hands. Since this cannot be had in the urban centres it will be necessary to remove the unemployed to the frontier camps or homesteads. There they will find opportunities to develop the physical side of their nature.

Let me quote the words of a far-seeing and practical business man, Sir George Bury, a former Vice-President of the Canadian Pacific Railway and at present a promoter of many large industrial enterprises. "Why not get back to first principles and make an endeavor to get the people where every person who will acknowledge the truth knows they should be—on the land? In British Columbia there are thousands of acres of the best land with some clearing and irrigation ready for the plow, and ready to produce all kinds of grain, grasses, and garden produce, all lying idle, and the people in the cities studying how best to solve the problem of the unemployed. When one stops to think soberly, the whole thing is a travesty on common sense."

If work is scarce, education must not stand still. We must make work. It is not enough to teach trades; we must create occupations—occupations that are not use-

less. Education is not advanced by moving stones from Dan to Beersheba and back again. That truly is education which seeks to determine how we can find work for all. How can we make equal opportunities for all? How can we educate all? How can we assimilate all the foreigners within our borders? These questions are closely related. Assimilation depends upon education and both depend upon employment. We must educate through work, not through idleness; and the healthy, happy settlement on the frontiers is one solution of these problems.

We have given so much thought to misery and attendant evils in the larger places that evil has almost come to seem necessary to the body politic. Is there not a danger of poulticing the social cancer so comfortably that a state of sickness in the metropolis, with all this interest and fuss, is more alluring than a condition of healthy, independent activity at the camp or on the quarter section? The true solution is not in needlessly multiplying institutions for the cities, but in making frontier life more attractive.

Mental and manual labor are both feasible on the frontier. The only solution for unemployment and the high cost of living is provision for the education of all classes, including those in frontier places. No back-to-the-land movement will ever amount to anything, unless men, women, and children have the same opportunities

for study and entertainment on the frontier, at the camp and settlement that they have in the city. Is this possible? It is not only possible, but natural. Higher education should never have become the monopoly of the cities.

How is it that except in the favored gold and silver areas of the north real progress does not exist? In all the great clay belt, with the exception of a few mill centres and a string of railway towns, primeval conditions still largely prevail—whole districts are still the hunting grounds of the trappers, and the haunt of the wolf, as when, in 1686, D'Iberville and his hardy compatriots pushed overland in their great winter raid on the James Bay posts. Why is settlement in the clay belt of Ontario largely at a standstill after an outlay of twenty-two millions by the province in the last twenty years, an expenditure largely incurred, too, for the purpose of settling the hinterland, and the founding of a growing agricultural community?

There is bread enough and to spare in the soil of almost every available quarter section of our great northland. Why huddle together in the hovels of the cities, blind to the lure of the great out-of-doors which bestows health and prosperity in return for faithful toil? Mother Earth holds in her lap an overflowing supply for all, but because of our failure to give a little timely guidance, assistance, and encouragement, many thousands of our new citizens remain a dead weight on the public when they might be

doing the country and themselves incalculable service in the unsettled places of our land. The orders for goods from the northern part of Ontario alone amount to perhaps $15,000,000. They should total $300,000,000 annually and be ever increasing.

The people of Canada can learn from the Russians of fifty years ago in the matter of land settlement. What was the policy in vogue in Russia during the reigns of the last three czars (1856-1917)? Siberia, an unmeasured land stretching many thousands of miles from the Urals to the ocean, was a problem to be solved, very similar in climate, soil, minerals and opportunity to northern Canada to-day. Alexander II (1856-81), a humane and enlightened ruler, started a fund—the St. Petersburg Land Fund —for the purpose of assisting in the transfer of Russians from the crowded areas of his European domains to the rich lands of Siberia. Pioneers were first sent into the new land. These reported on the fertile places and the river valleys. Families who desired to change were then gathered together and conducted in parties to their new homes. They received, not only free grants of land, but free food, seeds, tools, cattle and horses, free lumber for their buildings, and free transportation. Schools and churches were duly provided and organized communities, largely self-sustaining, were thus planted, with all the resulting advantages which such a system offered over individual settlement.

The Russian system aimed at making the old wealthy districts support the new Siberian settlements until the time arrived when they were self-supporting. The Western world reverses that method. We appropriate the wealth produced in the newer parts and expend the lion's share with the older and urban centres.

Nor need we turn to Russia. The settlement in Canada of the Loyalists at the close of the 18th century should be sufficient warrant for ample and extended assistance to pioneer and struggling settlements. The inducements offered to the devoted men and women, many of whom left comfortable homes in the Atlantic States, have been repaid to the Mother Country a hundredfold. Some millions of dollars carefully expended in food and tools and seed, enabled a heroic band to maintain themselves by frugal methods through long years of stress and eventually to prosper. Their descendants to-day number nearly one million throughout the provinces of the Dominion. Indeed, may it not be said that on occasion they have saved Canada to the Crown? They are the bulwark in this country of British connection.

Settlement to-day in the Clay Lands is not dissimilar to the problem that confronted the Loyalists. It means isolation in a new land, and pioneer conditions which demand rugged qualities and a perseverance which will tax the strength of the most hardy. Will not judicious assistance and encouragement by material advances to

actual settlers prove after another hundred years to have been an investment equally profitable to the whole Dominion? Northern and central British Columbia, The Pas, James Bay country, and Lake St. John are to-day what the St. Lawrence, the Richelieu and the Great Lakes were to the Loyalists.

Different plans have been advocated for the settlement of the clay lands of northern Canada. Perhaps the most important method of all, is colonization by townships, which would enable provision to be made for good roads, schools, churches, and social life almost as rapidly as settlers located. The scattering of the settlers throughout the vast northland has made it impossible for the provinces to provide them with means of transportation or with schools, nurses and doctors, with the result that many families have had to endure harrowing experiences.

Why not transfer the unemployed to townships suitable for agriculture, and locate them there in camps of say, one hundred and forty-four families each—the number required for one township? They would each have the promise of a hundred and sixty acres of land and the men would work at clearing a portion of each homestead to prepare it for settlement. Women can serve as cooks, nurses, teachers, and in a hundred other ministries in which they are so capable of serving.

These new lands need settlement first and foremost, not just haphazard squatting on a piece of land favorable

to river or mill or within reach of a railway or mine, but systematic colonization by townships. This policy should be promoted by the building, when necessary, of a system of light railways to assist the settlers of the different townships. Veterans' claims, and other lots held by absentee owners should be taxed into use. The settler himself must be prevented from becoming land-poor.

If settlement were systematically pursued throughout Canada what a great impetus would be given toward peopling with life the frontier places! New Brunswick could within a year employ 5,000 men and as many women; Quebec, 15,000 men and as many women; Ontario, 25,000 men and as many women. There would be kept busy in this way a large number in older Canada turning the wheels of industry to supply the needs arising from the new developments.

The Dominion Government has been criticized for assisting the returned soldier on to the land, and not into any of the other trades or professions. The government is quite right. The other trades and professions are all full. Clearing and cultivating the land is the only business in Canada that is not crowded. That is the best and most effective means of helping other soldiers in other trades and professions. The more work on the land, the more butchers and bakers and candlestick-makers will be needed in the cities; the more orders for farm machinery will be placed, and the more steadily will the wheels of industry be kept turning in older Canada.

The Dominion Government has given $40,000,000 in the upkeep of returned soldiers unable to find work. Now let an amount at least equally large be expended in clearing bush land in northern Canada. The soldiers and the devoted women who helped in the many phases of the war all richly deserve a new start and a college education. Evidently the latter is impossible within the narrow limits of our university buildings. Besides, after their life in the open, confinement does not appeal to most of the soldiers, even if baited with a degree. Should they all desire, however, four years at the university, it would be very unwise for the government to advance money for so impracticable a purpose. The accommodation is inadequate. The old buildings are too small, and coal is too dear to heat larger ones; but there are free lumber and free sites; free laboratories and free firewood; magnificently picturesque playgrounds, free gymnasiums and skating rinks; and free fish in the north.

Why should charity be doled out to our heroes, even if the state is the donor? There is not only work for all in Canada, but from every lone homesteader and settler whose life is endangered for want of a good road, for want of protection from fire and summer frost and disease, for want of schools and hospitals, there is heard a call for help.

It is not fair to take jobs from foreigners and give them to returned soldiers. It is infinitely better to create new jobs for the returned men. This will be better for the

returned man, and better for the foreigner. No soldier can retain his self-respect and accept work when it involves a sacrifice on the part of another. Surely our brave men who faced the enemy guns can face the vigorous, manly joys of a settlement camp in the north.

The men and women who helped win the war are needed to fight another war, perhaps equally important. This warfare is a fight against forces that so far have made a hazard of frontier settlement. These evils are fire and frost. For centuries they have reigned supreme in northern lands. In the older parts of Canada our heroic ancestors, at great sacrifice, have challenged them and driven them back to northern fastnesses. There, alas, their powers are malign. Within the last eight years more than four hundred men, women and helpless children have perished from fire in the Cochrane-Matheson district alone. The summer frosts have harassed every settler and brought to nought even all attempts at extended settlement along the Kapuskasing.

The greatest perils of the north are not bears, wolves, the dreaded flies, nor even loneliness, much as it is a factor, but summer frosts and forest fires. Until the time that the provinces and the Dominion undertake a great campaign, spending wisely and carefully huge amounts in relentless onslaught on these barriers to settlement, we shall look in vain to see whole areas of cultivated lands dotted with comfortable homes throughout these wilder-

nesses. Not in the isolated raids of hardy settlers, unaided in their efforts, but in a massed frontal attack by the whole people, must these dangers be removed. Fire and frost can be dislodged.

It is supremely important to the provinces of Canada, and to Ontario particularly, that great areas in the north be cleared and cultivated. Until this is done it will be neither safe nor profitable to sow grains and plant vegetables in our northern lands, because of summer frosts. This condition will not be reached in 1925 nor in 1930. No, nor even in 1960, unless the governments, universities and other organizations of Canada join hands and help the settler clear his lands. The homesteader single-handed will only waste his seed, his time and his money, sowing and planting, until a sufficient area in his vicinity is cleared and cultivated in order to make possible the successful growing of crops. In the neighborhood of Matheson and Cochrane in New Ontario, and about The Pas in Northern Manitoba, where approximately 1,000 acres are cleared in each locality, although this is not large enough to be an absolute guarantee, grains and vegetables have remained throughout an occasional summer uninjured by summer frosts, while in other parts of the vast Hudson Bay Basin a very large per cent of the homesteaders' crops are always frozen. Summer frosts must be combatted by clearing and cultivating large areas. This implies assisted settlements in the frontier parts.

One of the greatest of sins is to force, or even permit, settlers to live alone on their homesteads sans doctor, sans schools, sans roads, sans everything.

How ridiculous in practice are some of the homestead regulations, for example, in the Province of Ontario. They look sound in print, but are foolishness when applied to the man who is taking up land. Two returned soldiers were settling on land near Cochrane. They had neighboring bush lots, but were not allowed to sleep in the same shack. The regulations required that each sleep on his own homestead. The law should be revised. No homesteader should be allowed to live alone on any bush lot in northern Canada until a good road gives access to his place. At least sixty per cent of the land should be cleared on each lot in a whole area. Sixty thousand acres so cleared in any one area will assure to the settlers fuller protection from fire and frost. Nor is this impossible. If the province of Ontario can build a Chippawa Power Canal costing $50,000,000 for Hydro development, it can with equal profit to the province as a whole clear on a large scale, one million acres of bush land in the north, at fifty dollars an acre. The frost line can be driven back only by large cultivated areas.

In regard to the danger from fire, at present the settler is a menace to himself, to his family, to his neighbors, to the pulp and lumber companies, and to the State. He is surrounded on all sides by inflammable material which

may be transformed into a death-dealing conflagration by a spark from the fire or smudge of a prospector. To understand this peril, one has only to recall the fire of Porcupine, where at least eighty lives were lost, and the fires later near Matheson, and the surrounding country, where 340 people perished. The crime of leaving women and children between the jaws of a death-trap of forest fire, ready to be sprung by some wanton carelessness of camper or settler, is thus coming home to us. Let the awful spectacle of women and children crawling into potato cellars and wells only to die a horrible death, and the heroism of the devoted priest who sacrificed his life that he might comfort in their last moments the sixty hapless ones in a railway cutting encompassed by ruthless flames, arouse the body of the people to a fuller sense of their responsibility toward the settlers of the clay lands.

There seems to be no good reason why the Province should not form fire guards around the settlements, towns and villages of New Ontario by means of the removal of trees and stumps and the cultivation of the soil within a fixed radius of several miles. Despite the summer frosts some dairying may be carried on. Timothy and clover are often grown to advantage in these and other portions of cleared land.

Can we wonder that men and women shrink from trying to settle on a homestead which is miles from the nearest neighbor and which, for more than half a year, is

Barriers to Settlement.

A Road-gang in the Clay Belt—Good bush roads are a prime necessity in early settlement.

Clear whole townships—Small clearings will not overcome summer frosts.

(Facing page 60.)

cut off from any communication with the outside world? What is there to encourage them to endure the hardships and privations of these lonely places? They would be without medical or mail service and might starve, freeze or burn to death. If they could spend these months in a community camp along with other families and co-operate in the first hard work of getting the land cleared, there would be something not unattractive to most of our sturdy soldiers and immigrants in the thought of eventually having a little home and clearing of their own.

The dangers and hardships of a solitary life in a bush country are greater and more feared by the foreigners who come to our land without any knowledge of our language, climate, or customs, than are the privations of the cities, where they have at least the companionship of some of their own race and tongue. It is not to be wondered at, that under existing circumstances, when so little is being done for the lonely settler, they choose the lesser of two evils by crowding into the cities.

Why should Canada do anything so obviously short-sighted and contrary to her interests as to deport any normal, healthy man of any nationality who is willing to go on the land and help transform it from a wilderness into a fertile garden? Instead of deporting men, let us rather assign them each one hundred and sixty acres, or half that amount would be better, and let them begin by camping together, cutting the timber to be burned, skid-

ding what is valuable, and piling the rest into windrows.

If it is considered well, the money invested in this work could be made a charge against each homestead, payable when the homestead yields sufficient revenue. This could well become a fund to help others in the pioneer work of clearing the land still farther north.

Hydro development, from the many sources of "white coal" throughout the northern parts of Canada, will in future years stand sponsor for the comforts necessary to settlement life. The electric power will yet give pleasure and convenience to the pioneer, in his house, and other buildings too. The pumping of water, the lighting of stable and yard as well as the dwelling, the many domestic uses of electricity for household work and dairy enterprises, all indicate one solution of the many disadvantages which beset pioneering in a new country.

The Frontier College has on a number of occasions experimented with night and day schools in unorganized districts with a view to ascertaining the practicability of segregating homesteaders for educational, social, and economic reasons.

On July 14, 1914, the Hon. Wm. H. Hearst, former Premier of Ontario, who was then also Minister of Lands, Forests and Mines, kindly gave us permission to examine some townships with the object of operating a camp of home-seekers. The one we selected as being the most suitable for our purpose, on account of the quality of its timber

and the proportion of good agricultural land, was unfortunately too far from the railway to enable the settler to make a profit on his pulpwood at the prices then paid. In the meantime war was declared and while not abandoning the idea of township settlement, we were for the time forced to discontinue the undertaking. We believe that sooner or later the public will come to share our conviction that no more patriotic work can be carried on than the organized development of our great clay areas in the north by means of community educational camps.

For many years the writer has maintained that the penitentiaries of the Dominion should be moved to the clay lands of northern Canada. There, let these institutions become great community centres, well equipped for clearing whole townships, with part-time study, a necessary condition on the part of the inmates. Give each prisoner a promise of one hundred and sixty acres when he has cleared a minimum amount of land, and let his daily tasks, whether stumping, or running machinery, with the land-clearing gang, count as actual work in the clearing of his own lot. Give the land absolutely only when the prisoner has proven his good faith, and has done as much work and more, as is required of the ordinary settler. As a further incentive let his parole start from the time he has made the full requirements of settlement. He would then be in a position to marry or bring his family to his land with the fuller chance of a new start.

The Dominion Government began the clearing of land by gangs of men instead of by individuals—by "an assault in force" during the war. No more important step, or one fraught with more hopeful results has been taken since Confederation than the converting of poor forest land into good arable soil by camps of unemployed men. The fact that these men were prisoners of war is of little consequence, except that it demonstrates that the labor of all prisoners and unemployed should have been utilized in great land-clearing undertakings since 1867, or, for that matter, since 1763.

Another reason why settlement is at a standstill in our great clay belts to-day is the absence of women from the land. Even the privilege of living in camp communities instead of on individual homesteads, while a percentage of the land is being cleared and buildings erected, will not of itself hold the homesteaders. This has been demonstrated at Kapuskasing. There the returned men are allowed to live together. They have the advantage of a library, reading room, gramophone, and piano, and yet it is difficult to keep more than a baker's dozen of single men at the camp. Practically none took advantage of the courses of study offered at Monteith Agricultural College. Women in the Cochrane district, however, have used the Monteith College. Given free homesteads and similar privileges, women will not only fill the college with men, they will make settlement camps more popular for

"Settlement in the wooded lands of northern Canada will be encouraged when women are granted land on exactly the same terms as the men."

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men really anxious to make a home for themselves. Settlement in the wooded lands of northern Canada will be encouraged when women are granted land on exactly the same terms as the men.

In the report to the British Parliament, made by Miss G. S. Pott, and Miss F. M. Girdler, the two Englishwomen who were sent to Canada in April, 1919, to enquire into the openings in Canada for women from the United Kingdom, among other things we note the following:

"The isolation of farms in some parts of the provinces, especially in the middle west, renders the life of women very lonely. Not only is this circumstance extremely trying to young women accustomed to the crowded conditions of life in England, but it increases the difficulty of their employment in these districts even as domestic servants. That occasionally a woman can be found of abnormally strong physique and unusual character, for whom the life of a pioneer in lonely forests or uninhabited tracts of land possesses great attractions, is not denied. But dealing as it is their duty to do, with average women of normal strength and character, the commissioners believe that such women cannot take part as agriculturists in the settlement of new districts.

"In fact, the economic unit required is the family, not the single woman. This is undoubtedly the case with regard to forest and bush lands. The work connected

with the clearance of land is not within the power of women and they are unable to take advantage of facilities offered for acquirement of cheap undeveloped lands such as are taken up by men. In selecting farms suitable for women occupiers, the commissioners have usually been obliged to recommend that of the improved and therefore more expensive class."

It is just here that these women investigators err in their conclusions. It is true that the economic unit is the family, but that is the very reason why the single woman should be present on the land, and this can be brought about only by giving her the same rights and privileges as are given to men. Invest the single women with property in the north and you have taken an important step toward encouraging the family unit on the frontier.

How inconsistent we have been! We have taken scores of occupations from women, that were peculiarly theirs, and have given them to men, and refuse to give women even undeveloped wooded land. Why should men do indoor work that should be done by women and could be easily handled by them, such as waiting on table, cooking, selling goods that are light, keeping accounts in stores and banks? Either we should give all these jobs to women and send the men to clear and cultivate the land, or we should give the land to women on the same terms as to men. The latter is the fairer plan and more consistent.

Give women homesteads of their own. They can either work with their own hands or hire others. They can even use not only labor-saving farm machinery, but also machinery for clearing stumps and trees. The health and happiness and longevity of women will be immensely increased. Besides, the possession of land will open up a thousand new kinds of work for other women than those on the land. These new occupations will take and keep women out of sweat shops, enhance their self-respect, and give them new objects, and a new hold on life.

At present there is no motive to draw men and women north. Free land, fellowship with men and with their own sex, at large land-clearing camps, entertainment, and the privileges of acquiring an education, will attract women. The social environment that only good women can create will, with the hope of recreation, fun, education, and a home, draw men also. Few men have the heart to ask a young girl to go to a wood lot in the heart of the forest, to share a home. Most men realize that it is hopeless to expect a favorable reply. Thousands of prospective marriages come to naught when the young woman learns that she is expected to go out of civilization. But if young girls are in the north and own farms of their own, the chances of marriage are many times increased.

It is a fact that in industrial centres, men commonly marry women whom they meet at their work. Investiga-

tions carried on in one American city with a population of close on 2,000,000 show that more than half the marriages of working women were made with men in the same occupation. It is true also that lady graduates largely marry college men. Homes will only be established successfully in the northlands by community-settlement propinquity. Horace Greeley said: "Go West, young man." I would say: "Go North, young woman."

We have not only the problem of the returned soldier, we have also the problem of the returned woman, for woman took her place in the world war just as well as man. Woman came to the rescue when munitions were needed. She must come to the rescue now that homes are needed, for soldiers, widows, and orphans, as well as for herself. It would be a sin against womankind were her heroism and self-sacrifice forgotten and unrewarded. There never was a time when public opinion was in a more plastic, more receptive state. Women have demonstrated their right to share in moulding public opinion. They should also seize the opportunity and demand an equal share of the land.

The greatest need of Canada is population. There is room in northern Canada and in the West for many thousands of women from older Canada and the British Isles. It has been said there are two hundred thousand young men on the prairies, living the lonely life of the

bachelor. Let the proposals mooted for the utilization of all unoccupied lands within 20 miles of the railways in western Canada, include as well, the bestowal of free land upon one quarter of a million stout-hearted and vigorous girls, and this evil will be remedied. The true national policy of Canada consists in giving the freest possible access to nature's storehouse, to all, whether man or woman, who have the will to succeed by productive work.

The church has at length decided that an important forward step is necessary. If this step is to lead to definite results, it must consist in a firm and immediate decision on the part of the church to seek to save the mind and body as well as the soul. One of the Psalmists says: "God setteth the solitary in families." What a divine work this of rehabilitating in the old homes and in new ones, families scattered far afield by some unkind exile, war, or poverty.

The war has brought a great opportunity to the door of the church; it has also given a great incentive to education. If those who have the power of reshaping systems of education take advantage of their opportunities we shall progress by leaps and bounds.

The writer knows a congregation which has a good church building rarely filled, but whose motto in 1919 was: "A new church by 1920." The Forward Movement is trying to lift itself by its own shoestrings if it seeks to make progress by building new churches in

cities where there are too many churches already. It should look beyond its own walls to the settlements and frontier places of Canada. The better motto would be: "No new churches until the returned men, widows, orphans and disabled are housed. A farm for every disabled soldier; a farm for every widow" should be our objective. History goes to show that a nation with expensive, massive churches and crowded, squalid homes for her people is a decadent nation.

It is becoming popular for individuals or churches to support missionaries in the home or foreign field, since it fosters interest in the worker and his work and this advances the cause as a whole. Each church might also support a family on the frontier as well as a missionary in foreign lands. Let the universities come to the aid of the governments and demonstrate the wisdom of organized land-clearing settlements. In the same way, very valuable home mission work could be done by assisting some homesteader to become a happy, self-supporting Canadian, whose economic value will be enhanced in proportion as he increases the area of land cleared.

Can we not show our governments, Federal and Provincial, that the scheme of starting the homesteader by advancing him the capital he needs and helping him to clear his own quarter-section while living in camp with his neighbors and enjoying ordinary social amenities, is not communistic or utopian, but thoroughly practical? It is based on the principle of individual ownership and of

personal property. Nothing is more certain than that the governments will assist it, and in time adopt and father the system. Thousands of hungry and ill-clothed families in the cities of the old countries would gladly take up homesteads in the northland, if given reasonable assurance that they would be taught how to work and would have sufficient support to keep the wolf away from the door while clearing enough land to make the cultivation of the soil profitable.

In my judgment the church does not receive the sympathy she deserves at the hands of the toiler. Here is an opportunity for the church to prove herself. If the scheme is a success, our millionaire philanthropists would doubtless found whole townships. Let the settlement or township be called after the man or church or club that is responsible for making its settlement possible. Let the universities get up strong organizations that will deal each with its own district, and ask the cities to devote as much energy in promoting settlement on the frontier as they have given to community efforts in the cities.

In connection with such a programme it would seem advisable that both the federal and the provincial governments make the systematic clearing of bush clay lands, and the draining of the muskegs of northern Canada, a great permanent public policy. This necessarily implies that they:—

1. Equip and maintain in every township thrown open for settlement in the bush lands, comfortable land-clearing community camps.

2. Encourage all willing workers who, in times of unemployment, are unable to get work elsewhere, to go for a few months to such camps. This need not entail any obligation that they take up land, or that they remain permanently in the north.

3. Enable any association, club or church to foster such camp settlements.

4. Provide these land-clearing communities with every facility for entertainment and study.

5. Make at least as equally well organized and sustained efforts toward frontier education, land clearing, and settling the clay lands of northern Canada, as are expended on Hydro development in some of the provinces.

6. Urge homesteading by proxy. Let thousands of farmers in the older and more settled parts of Canada apply for bush-lots in the north which can be organized and settled collectively. Instead of sending their hired help adrift in the fall to augment unemployment in the cities, they might easily provide work for them during the winter months in community villages.

7. Give each large industry throughout the Dominion a whole township or more in the clay lands of the north to be settled by proxy. Ask these industries to make systematic land clearing and settlement a department of the business to serve as an outlet in slack periods. Thus, not only give steady work in comfortable land-clearing camps, in times of unemployment, but encourage also the permanent settlement of these new townships by offering later the lots on easy terms to those of their employees who wish to remain on the land.

CHAPTER V.

EDUCATION AND THE FRONTIER SETTLEMENT.

Everywhere there is a demand that education should have relation to living, that the schools should express the daily life. Nowhere is this more true than in the rural settlements. Education, which has all too long been centralizing in the larger centres, and thus draining the very places most in need, should be supplemented by efforts that would meet best the needs of the newer parts. More than ever the teaching of agriculture, the training for the social requirements of a community, the technical education pertaining to any one district, should be localized. The efforts and money expended in accomplishing this must be directed largely toward preparing homes and giving material comforts to those on the hinterland.

In addressing the City Council of Brockville recently, Dr. J. B. Dandeno, of the Ontario Department of Education, said: "The education systems of the past have tended to assist in the depopulation of rural communities through their teaching of business methods more adapted to cities and towns instead of along agricultural lines

He spoke of the summer courses held annually, principally at Guelph, where public teachers were given instruction in the basic principles of agriculture as one method of keeping present-day systems in touch with the needs of the settler in the newer parts of the Province.

We must have more equality of opportunity in education. The state may assist in the education of the few who show special aptness for certain lines of work, but not wholly at the expense of those beyond school and college walls. Twenty years in the frontier places of Canada have taught me that those in settlements and camps are not receiving their share. Not only a public school education, but also a high school, and even a college education, must be brought within reach of all. To this end no part of the population is more worthy of consideration than those pioneering settlements in the newer districts of Canada's northland.

Too long our education systems have been putting the cart before the horse. We started out with a book in our hands when we should have begun with a tool. The order should have been the tool first, then the book. The boy who found the book dull and uninteresting and a mystery finds the tools things of living interest. It is the tool that interprets the book and not the book the tool. The tool puzzle will do more for education than the treatise on conic sections. Experience first; arithmetic, geometry, algebra, afterwards. It is because we are

trying to put theory before practice that so many college men and women find mathematics, physics, geometry, algebra, and trigonometry a bug-bear.

There is no reason why the curriculum in both town and country should not be extended to include many useful and common-sense subjects besides agriculture, domestic science, and manual training. A merchant in Toronto who sells ladies' goods referring to this matter, said to the writer recently: "There, is a suit marked $23.00. If I were to show that to lots of young girls who come into my store they would not buy it. But if I changed those figures to $50 they would buy it. It is a shame that young people are not taught more common sense and useful things. Too much with the text book, not enough of practical training." A clever and well educated clergyman, speaking of his daughter, a high school student, remarked to a normal school teacher: "Mary takes her books after tea to her room and we do not see her again until morning." The teacher very sensibly replied: "I am content that my daughter stand nineteenth in her class. I am not going to allow her to study at home. She must make the beds and take her share in baking wholesome bread and canning fruit." Children should not be prevented from doing light work in factories or in the home. They should work part-time. It is just as wrong to allow them to be physically idle as it is to make them do too much. Part-time work, part-time study, and part-

time play is the ideal condition. No boy will develop normally whose nose is kept at his books all day with home study in his evenings.

The work of the secondary schools as well as the universities is not closely enough related to the daily work of life. One antidote to this is to give these pupils of the high schools and collegiate institutes a considerable share of the manual work to be done within a twelve-mile radius of their school. Too much theory—not enough manual participation in the work-a-day world—causes such conditions. Put the schools to work. The credits for matriculation of any pupil should be based not only on class-room attendance, but on manual work as well. This could be taken in the near-by factory or mill, if not in the settlement.

Let us go a step further and require that the highly centralized systems of education, of the Canadian provinces, shall take more interest and practical concern in the needs of both young and old in the frontier settlements. So far, to a great extent, the departments of education have washed their hands of this task.

There should be more studies involving physical exercise. It is too bad that students are forced to resort to dancing and hazing for sufficient exercise to keep them in health. Why waste such physical exuberance, when the muskegs of the north need draining, and millions of acres must be cleared.

One Solution of Settlement Problems.

"Put the schools to work. The credits of any pupil should be based not only on class room attendance, but on manual work as well."

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Our systems of education are distorted, as long as they relegate manual work to the background. They retard frontier settlement. The schools and universities should exist to facilitate development in all parts. Some phases of our system must go, and go quickly.

The advocates of manual training and consolidated schools have done yeoman service in this direction. More and more the tendency is to adapt primary and secondary education so as to bring it to the door of every boy and girl in agricultural communities. This movement for the consolidation and improvement of rural schools will prove a great blessing to the scattered settlements in the newer parts.

Consolidated schools are valuable in any new district. Through them a larger average attendance is assured, with all the stimulating influences of larger classes. Better school buildings result, which serve a whole township or more. One big asset of such schools in struggling settlements is the bringing of pupils in rough weather a distance of three or four miles in heated conveyances when it might otherwise be impossible for them to walk a mile. Consolidated schools have played a fitting part in the initial stages of development in the clay belt of New Ontario. They can in turn be widened in their activities to minister to the community needs of frontier land-clearing camps and settlements by providing libraries, assembly halls, and other details such as meet the social

and intellectual needs of a whole countryside in a new settlement.

It has been said that "our systems of education train boys not to become better craftsmen, but to be unwilling to be put to any kind of craft." If our boys' hands were trained to honest toil, and educational facilities provided at the camp and homestead, would not more of them seek employment on the frontier? Would the English-speaking men desert the camps and works? Would our employers be forced to import Chinese and Japanese for many kinds of work?

Let provincial and even Dominion funds encourage by direct grants these centres of activity on the fringes of population throughout northern Canada, as well as in older settlements, and much will be accomplished toward assisting and sustaining a community spirit. Co-ordinate the consolidated schools with other special schools for a whole district, promote courses in agriculture, mining, and other forms of industry, giving facilities for the youth of the settlements to attend during winter sessions, and a big step will be taken toward keeping the boys and girls in the community camps and settlements of northern Canada.

These pupils in turn can then carry on work on the land; they can at the same time assist their parents, who are pioneering a homestead. To attend a high school or collegiate will not necessarily mean leaving home. Even

Another Solution of Settlement Problems.
Link up the Agricultural College and the Settlements.

A better Farming Train—Canadian Pacific Railway.

Farmers of New York State studying pests under the direction of demonstrators from Cornell University—the State College of Agriculture.

(Facing page 79.)

those who ultimately go on to the university will have a couple of years longer to remain at home under healthier and more normal conditions than if boarding in a town or city. The love of manual labor will grow. In addition there will be the moral and spiritual value of being in their homes at a time when it is infinitely important that they should be there. The public schools of the settlements must take on the functions of the high school and college with the forest, kitchen, stable, garden, and field as laboratories.

Neither should a period of teacher-training necessitate leaving the settlement or northern community. Provision should be made whereby a successful term as an assistant in the nearest consolidated school or co-ordinated group, would prepare the young man or woman to go at once as a teacher into a rural school. This model training in continuation schools would provide scores of young teachers, in the very parts requiring teachers, with a knowledge of the local needs, and an interest in their home community. The frontier schools should be self-sustaining in the matter of supplying community needs. Train more young men and women on the frontier itself—not in the urban centres.

The closing of the faculties of education in the universities, and the apportioning the teachers in training to county centres would be a step in the right direction.

Too much is required in the nature of attendance on lectures in the larger training centres. Not enough credit is allowed for a knowledge of the needs of the settlements and, better still, the aptitude to lead efficiently in the work there demanded. Our present systems of education bring hardship on the very people they should benefit most. They are headed the wrong way; teachers are taken away from the rural parts where their work is most needed. Such systems do not tend toward clearing and cultivating the land.

Under Dr. Thornton, the present able Minister of Education for the Province of Manitoba, some remedies have been already applied to these very needs. In dealing with the situation of remote and sparsely settled districts, the legislature was asked to provide loans for the erection of comfortable school houses, and teachers' residences as well. The idea of teachers' residences might be generally adopted with advantage throughout the whole of Canada, particularly in newly settled districts. It would tend to a more permanent teaching staff.

These school buildings are not temporary buildings, but up-to-date one-room schools competing with the best one-room schools in the Province. They are built of frame on a concrete foundation. The general plan is twenty-four by thirty-six (24 x 36) feet, with an entrance porch. This size accommodates comfortably fifty children with sufficient space for a teacher's room, cloak room,

and ante-room. The buildings are not plastered, as that would be impossible under present labor conditions, but they are warmly built and lined inside with beaver board or plaster board and are comfortable.

In every case the teachers have a companion, usually a sister, mother, aunt, or some other near relative. Several widows have their children with them. In some cases the teacher has a grown-up girl from the settlement to live with her and thus teaches her domestic science and the art of living in a practical way. This in itself is a big step in the right direction, toward solving the problem of education for frontier settlements.

Among settlements of foreign-born near Lake Winnipeg, these schools play a big part. To quote from Dr. Thornton:

"The little folks themselves are just as bright, teachable children as any others, generally with a keen desire to learn, and it is no uncommon thing to find a teacher starting in with thirty or thirty-five pupils of assorted ages who have not heard one word of English or had a day's education. In three months they will have established a fair working vocabulary, with a knowledge of names, words, and qualifications. Manual training benches are installed in eight of these schools. A goodly number of teachers give regular instruction in knitting and sewing and in twelve schools hot tea, hot soup, or some other form of simple lunch is prepared at noon. This has a valuable

bearing on the health and *morale* of the children. The noon hour, when the hot lunch brings the teacher and children together in an informal fashion, is very often the most valuable educational hour of the day.

"Evening classes are being held in connection with about one-third of these schools on two or three evenings a week. They are attended by adults varying in number from ten to thirty and in age from sixteen to sixty-two, desirous of being taught in the English language."

The Province of Manitoba is making a sane and constructive effort to bring education more fully into touch with her frontier settlements.* Saskatchewan, Alberta and British Columbia are now doing work equally worthy of note. Manitoba's step towards the frontier settlements is now being followed by the other provinces. Is this splendid move a prophecy that in the near future Manitoba will be the first to extend its system of education, not only to scattered settlers, but also to its camps and works? Will Manitoba hereafter forbid homesteaders from living on their isolated lots, and undertake with the aid of its university the settlement of its northern bush lands by means of community groups equipped with facilities for an all-round education of mind and hand?

It is said that every Canadian college and university between Halifax and Victoria is overcrowded. What with institutional churches, college settlements, and technical

*See report of Hon. Dr. Thornton, "The Teacherage and the School, 1918."

schools, the city dweller becomes a disproportionate factor in the situation. The settlements and camps upon the frontier suffer from this undue centralization. The ends of education are thus to some extent defeated. Let us give more thought to the outlying places and their needs. Once the hide-bound traditions of the educationists are broken through, we may look for the extension of our systems of education to the remotest corners of our land, wherever there are citizens in need of instruction.

CHAPTER VI.

THE PLACE OF THE UNIVERSITY.

To what, then, must we look as the centre from which will go forth increasing activities to remedy these needs of workers in frontier places and in settlements? To the university.

To the university unquestionably falls the task of redeeming the labor of the hands from the disrepute into which it has long fallen. The university, alas! too often is hedged about by false pride, custom, and precedent, and is unwilling of itself, to stoop down and fraternize with the worker. The university must die if it would live: must die to all it counts preferment and take the plunge into what to it might seem loss of caste and social distinctions.

The university has too long been a sort of hothouse apart from the world. From it young men and women are cast upon a practical world, with papers which certify that the holder has a mind capable of mental gymnastics. But what of his untrained hands, hands that do not know realities, because the mind does not know realities? Like the Lady of Shalott, these graduates move in a land of shadows until readjusted to the affairs of the work-a-day world. The university must become more of an execu-

tive and degree-conferring body and less of a monastery. The teaching must be largely done beyond its walls in field, factory, and mine. The ideal state will yet educate all the people, not a chosen few. Towards this end we must all strive.

Many a man, who has finished his Arts course, finds that he has no occupation and is fit for none. He knows enough, but can do nothing. He has learning such as it is, but lacks capacity readily to adjust himself to life and work. Too long it has seemed that the only aim of our colleges and universities is to fit a man for the so-called learned professions: law, medicine, the ministry, the priesthood, teaching, or even journalism. Why just clever lawyers or skilled physicians? Why only logic for the pulpit?

"Train men's intelligence and you can trust them to take care of themselves and the country," says a university president. There is nothing truer in the world. Then let us train them; not only a favored few, but all men and women wherever found at their work.

The university student in attendance on lectures luxuriates in a rich soil and a congenial atmosphere. It is a drawback, that there is not sufficient storm to stiffen the tender blades and freshen the soil about the roots. The plant savors of the hothouse. Like semi-recluses, they are pale in the spring and their muscles so lax that they are unfit for manual labor until a fortnight or more has passed.

The university has not kept step with the march of time. These are days of automatic rifles and machine guns. Let us not equip the men in our universities with bows and arrows.

These special opportunities to study science and literature and art should not end at the universities. Our frontier men and the settler in the north are entitled to the inspiration of Emerson and Carlyle, and the humor of Mark Twain. Spare the differential calculus, the twelfth book of Euclid, or anthropology to the few, but by all means give opportunities to the pathfinders of our great heritage. Teach them, as well as the chosen of the cloister, how to work, live more nobly, and progress.

Too long have the dreamers in the seats of learning perpetuated with their esoteric groups the methods of the 13th century: scholastics in practice; alchemists in but another guise. The thinkers dwell apart, while the practical toilers remain fitting descendants of the bondmen of another age. The universities must come closer to the people who need assistance and daily help. The universities to-day are largely to blame for that age-long division of society into the educated and refined few on the one hand, and on the other hand the untrained many to whom all opportunity of higher education has been denied.

But there are signs that education is beginning to look out from her long sojourn in academic shades and college groves. Among the subjects on curriculums to-day we

Log Branches of the Frontier College.

Bala, 1915.

Loring, 1908.

Nairn Centre, 1900-1.
This was the first of forty such log branches built by the Frontier College in the more permanent lumber camps of Canada.

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find more and more studies that are bringing closer the university and the people. Let these be extended until the needs of settlers, factories, camp men, and workers of the frontier receive their due attention, as well as those of the cities.

The university has long neglected to teach the young the dignity and the worship of manual labor. It has often frittered away their time and health and means in acquiring mere shibboleths of "culture" which led directly away from work with the hands. This has been done, too, in the very face of the great need in Canada for men whose hands and feet are trained as well as their reasoning powers, to lead in the development of the natural resources of our common country.

Why should not a part of a Canadian's education consist in blazing and cutting a road, extracting a stump scientifically, clearing ten acres of land, digging or boring a well, building log shanties to be used as a house and barn for soldiers, soldiers' widows, or inexperienced settlers? Let us qualify the students of our universities to take their places at the outposts of our civilization. Scientific methods of clearing the land should be taught. The nearby water powers ought to be developed for energy. Wood should also be converted into alcohol and steam for clearing the land. As it is, the immigrants who are locating on our woodland frontier soon become discouraged on their school-less, doctorless, roadless, unde-

veloped homesteads, and leave the farm to swell our urban centres.

Put the stadiums of the Canadian universities in the northland; loop up the physical exuberance of the student with the needs of the frontier. Surely students might as easily spend their week-ends up north as travel three or four hundred miles to engage in popular sports. One can conceive of college men having far more genuine fun in shanty-raising, in a chopping or stumping bee, with the object of helping a family of boys and girls to become worthy citizens of our great empire, than in a rough-and-tumble bull-dog fight with one another with a motive barren of any altruistic content. The latter develops brutality, the former a love of others. There can be no question which tendency a university should seek to encourage.

Of course it will always be necessary to have stationary buildings and laboratories at fixed centres and an increasing number of them, but these should no longer be self-contained. They should become the parent of other universities and schools and like Abraham of old inherit the promise "as the stars so shall thy seed be." In this age of easy transportation, expensive apparatus that could not be obtained by smaller institutions could be kept on wheels and made available when required for courses of study in a number of centres.

Industrial, technical, and even agricultural schools, as

well as the universities, seem unable to grow or multiply. They have not learned to walk. None of the present forms of education is fully adapted to the needs of the frontiersman, nor in fact of the rural population generally. But hopeful signs are not lacking. The adaptation of the school to industrial, agricultural, and social uses—termed "the discovery of the school house"—correspondence schools, chautauquas, the short courses recently organized by many provincial governments, and universities, and the Adolescence Bill of 1919 of Ontario are steps in the right direction. They are bound to result in something better, something more in line with this progressive age of wireless telephony and aerial navigation.

No other institution is so well qualified to meet the needs of the frontier as the university, but it has itself much to learn before it can achieve the best results. To the average college professor, rather than to the "Man of Sorrows," whose hands were callous with plane and hammer and chisel, is the proverb applicable: "Physician, heal thyself." His education and His method of teaching were perfect. His students belonged to no Greek letter societies, but they were masters of the deep. Their Professor founded a great college of ethics and manual training. He was able to confound the doctors of the law because He had battled with the world as it exists in fact as well as in imagination. His laboratory was nature. Even at this late day the schools and univer-

sities, like the scribes and pharisees of old, only partially prepare their students for the duties of life. They bestow their favors only upon those who seclude themselves in large measure from the world of practical things.

This one-sided education of the university deprives the young men and women of that common-sense utilitarian bent which is their nature. The world of books is so unlike the actual world in which they afterwards find themselves battling for bread that they take years to become acclimatized. The Nazarene went with his students to their work and taught them how to land a catch of fish, how to handle a boat in a storm, as well as how to comfort and heal the sick. The movement reported in the United States, to provide courses of study in agriculture for clergymen, sounds too sensible to be true. Some seminaries are beginning to realize that the preacher who knows nothing about the mundane world in which we live is badly qualified to give advice regarding any other.

To make men, not money, is the true object of life. The tilling of the soil, the felling of the forest, and the manufacture of pulp, the mining of gold, and every other great work should be conducted with a view to the physical, mental and moral health of the men engaged in it. The factory, workshop, or camp should be a school, and the employer a schoolmaster, principal or college president to his employees.

The factories in Great Britain, where the Fisher Bill is in operation, are like schools with manual training appendixes. Why not extend the age limit for part-time study and part-time work from 18 to 81, and convert every factory, camp, and settlement into a school and college, where cultural subjects are given the same place in the curriculum as utility subjects?

A two-year course in the Victoria High School is to be arranged in affiliation with the University of British Columbia. High schools are assuming more and more college work and public schools more and more high school work. The progression should keep on until the boy and girl may receive a college education without going farther from his home than a half-hour on the street car, or an hour's ride on horse-back.

Both the church and university are indispensable; but because the latter is unhampered by the blind prejudice that exists against the former, because its success is not measured by the converts it makes, because it appeals alike to the ambition of rich and poor, because both covet its degrees and its learning, the university is pre-eminently called to this high office of joining the hands of the downtrodden poor and the wealthy aristocrat. It is because the university graduate is in the position to obtain the interest and aid of the capitalist that he above all others must reach out and take the hand of the toiler.

That splendid institution the kindergarten blossomed into manual training, technical, industrial, and agricul-

tural schools. University clay, however, has been found to contain an alkali, and will require a solvent that up to the present has not been obtained. Universities should learn the lesson that the way to life is along the path of death, that to give is in reality to get.

The universities have too long lived a secluded, introspective life. They have, like Emerson's heroes, surrounded themselves with "quantities of unavailableness." They need pruning and grafting. Their growth is stunted. They will never develop as they should until they plant young universities everywhere. If the universities rise to the occasion and send half their students and professors to settlements, camps, works, and factories, they will convert these in turn into affiliated colleges and so diffuse education. Let the universities efface themselves by giving half of their professors and half of their students as actual workers and teachers at factories, works, camps, and settlements. They will in this way enlarge their boundaries and increase their attendance.

Just now the University of Toronto is asking $4,600,000 from the Province for new buildings. By all means let the Ontario Government spend this amount and more on Varsity buildings, but not in Toronto. Let Varsity put up two hundred and fifty buildings instead of a dozen. With that money, Toronto University can build and man two hundred and fifty branch universities throughout the Province. These will benefit many times the number of

A Frontier College "Hart House," one hundred miles north of Edmonton, at a camp of the Excelsior Lumber Company. For twenty years the Frontier College has attempted to supply such places to frontier camps.

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students and make Toronto a vastly greater university than she now is. Instead of one, let there be hundreds of Hart Houses, built of good peeled logs, for the comfort and entertainment and co-education of young men and women, in lumbering, mining, construction, and land-clearing camps, as well as at factories, mills, and other industrial centres.

Education must be obtainable on the farm, in the bush, on the railway, and in the mine. We must educate the whole family wherever their work is, wherever they earn their living; teaching them how to earn and at the same time how to grow physically, intellectually, and spiritually to the full stature of their God-given potentialities. This is the real education. This is the place of the true university.

CHAPTER VII.

THE UNIVERSITY AND THE FRONTIER.

War called on men to offer their bodies "a living sacrifice." The call was for bodies, human bodies, efficient in all their members, hands and feet as well as heart and brain. Now more than ever in history the human body is above par. The war has ended, but the pressing need is body and brain, and duly balanced learning: not confined to the universities alone, but extended to the workshops, the camps, and the settlements.

A most interesting indication of the new attitude of employers to their workmen, is their willingness to give them part of their own time, from one-eighth to one-tenth, for study. A sage has said that an employer has other and higher relations to his workman than the payment of cash, or than that of a mere "cash nexus." No employer of labor who does not regard himself as being entrusted with the education of his employees is worthy of the name employer.

It is clear then that the world will no longer be able or willing to regard the workman calmly as doing unenlightened labor. Every workman must be in himself a

master workman, not a human machine. Educated, everyone of these men would increase his value to the world fourfold. There is no doubt of that. By this means our old world will gird up her loins, and hasten out to repay the ravages of the late horrible war.

Is not the day already here when technical and cultural instruction will form a part of the day's work? The problem is to secure teachers enough for so great a task. In order to educate our returned men a great army of tutors and professors is necessary. The outline suggested by Queen's, Toronto, and other universities for returned soldiers who are non-matriculants, is excellent for those who can afford to live without work in Kingston or Toronto. The difficulty, however, is to secure enough teachers to bring higher education to those who must work for a living.

Manufacturers and large employers of labor throughout the Dominion are asking for trained instructors. The need of such work is now recognized by many large employers. Some employers are getting assistance through the correspondence schools for the training of their workmen. One of the big industrial concerns of Canada, the largest of its kind in the world, has offered within the last year to pay the fees of all its workmen who will complete a course with a correspondence school; alas, too, that it should be with a foreign school! Herein lies food for thought for our Canadian universities. Will

they still stand by and leave work of this nature to be done by colleges outside the Dominion?

It is a big reflection on the genius for adaptability of our universities that they have left this vast field for correspondence schools. These schools have done good work, but the field is so great that they have accomplished little more than call attention to the need.

I am taking the liberty of suggesting to the universities that the problem of the lack of teachers may be solved in the following four ways:

1. Arrange for encouraging extra-mural courses everywhere.

2. Confer degrees in arts, theology, music, and science upon all who are able to pass the required examinations irrespective of where or how they attain their hard-won training and knowledge.

3. Grant no degree to anyone physically fit who has not, during his undergraduate work, spent at least two years in part-time teaching, part-time study, and part-time manual labor.

4. Send half their professors to do manual work and to teach at factories, settlements, camps, and works.

At least two years of the arts course and a year or two for the master's degree could reasonably be spent in absentia, physics, geology, zoology, chemistry, botany not excepted. The apparatus required for these in the first year is so small and so inexpensive that it could

Frontier College on Railway Construction.
Instructor C. O. Banting teaching his fellow-navvies.
Southern Saskatchewan, 1909.

Frontier College in the Coal Mine.
Instructor Arthur Tingley teaching his fellow-miners from Newfoundland, at the Dominion Coal Company's camp, Birch Grove, N.S.

(Facing page 96.)

easily be provided. The students who wish to specialize in these subjects could take the advanced work of their courses during the two years spent at the universities.

Especially should graduates intending to enter the teaching profession be allowed to take their faculty work extra-murally. A graduate or undergraduate studying for the profession of teaching could get experience equally good, and more of it, with classes of adults in land-clearing camps and factories than with classes of pupils in the cities. A well-known former public school inspector recently wrote me: "If I were asked by a teacher-in-training where he could best learn by experience how to educate others I should advise him to spend a winter in a polyglot lumber camp as a member of your staff."

The universities are well able to do this. According to information obtained within the last month from the respective universities more than 10,000 students enrolled are taking courses that well might be taken part time in absentia. In that case close on 1,000 lecturers and assistant professors thus released could profitably spend their whole time in manual work and teaching at subsidiary centres improvised at needed points.

By requiring that undergraduates in arts, forestry, education, theology and science take two years of their course, and that medical students take their first year extra-murally, and spend these at camps, factories, and

other works as teachers, and part-time manual workers, a very real step would be taken in the solution of the problem of how to bring higher education to labor.

Reducing the number of years' attendance required for a degree, on condition that the extra-mural years be so spent, would keep up mutual intercourse and sympathy between the universities and workers. Instead of lessening the total number of intra-mural students at the universities it would ultimately increase it many-fold. It would then be possible for the worker to prepare matriculation at his work, to take part of his course at his work, and to go direct from his work to complete his course at the parent university. The power and influence of the universities would be increased enormously.

Consider, too, the advantages to the students themselves. In addition to knowing how to study, they would know how to earn a living, which is something many graduates do not know. They would be more self-reliant, having had less spoon-feeding than the man who has had four full years of intra-mural study. Having acquired the habit of independent research, they would be more likely to continue their studies after graduation and through life. That a student can do more and better work in attendance than outside the college walls is not true. What he acquires by his own efforts is of more value to him than what is fed to him.

What is true of the universities is equally true of the high schools and private colleges. The work of the second

and third years in all of these should be taken at some factory, industrial plant, or camp. This would release another eight or ten thousand students and teachers to supplement the army from the universities.

Why not make a further step and ask for a similar sacrifice on the part of the professions? Why should not law and medicine and the church respond, as well as the universities and secondary schools?

Everywhere is heard the complaint of the "poor pay" the church gives its servants. Are there not too many of them for the work? Scores of churches could be used for night classes and other forms of community work. Half the number of clergymen could go as teachers to the factories and construction camps. A living wage could then be paid both to those who stay at home and to those who teach. The churches, we are told, find difficulty in securing men for the ministry. Let the seminaries associate their studies more in daily contact with the world's work, and it will help to solve the problem of a lack of students.

Law, too, has long been overcrowded. The Osgoode man could well afford to spend some of his years as a student in closer touch with life and labor.

The profession of medicine can also well spare one-third of its doctors. The medical service at camps and works has always been by proxy. The doctor who had

the strongest pull with the company got the medical contract. He could sit in his office at the base hospital, look after the cases sent in to him, and have a medical student as an orderly do the actual work on the grade and at the camps. Were some of the doctors sent to reside at the industrial plants and camps we would have some real medical service.

It is not to be inferred, however, that the leaders of university life and thought in Canada have totally ignored these conditions. Nowhere have I met more cordial co-operation than from the heads of Canadian universities. The late Principal Grant gave me encouragement and support from the first, as also his successors in office. Those were times, too, when such purposes needed the approval of big-souled men such as he, to be even countenanced by many employers. The recently formed universities of the West have given uniform assistance wherever asked. McGill since 1901 has allowed the use of her travelling illustrated lectures for the men of the bunkhouses and camps. President Falconer, of the University of Toronto, has also exerted his influence on the side of frontier education.

There are radical changes being wrought in our systems of education. Public opinion in the United States supported the compulsory education of nearly three-quarters of a million young men in order to carry on war. Public opinion in Canada will now, and for all time, support the

Bringing the College to the Workers.

The Frontier College in the Lumber Camp.
Andrew Patterson, M.A., with his class of fellow-lumberjacks, on the North Shore—winter of 1902-3.

Fellow-laborers with the Instructor—A group of Finns, Swedes and Austrians, in the Upper Fraser Country, B.C., 1911.

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compulsory education of all adults in order to prevent war. The British Education Act of 1918, commonly known as the Fisher Bill, places the claims of education before those of industry in the British Isles. It makes education legally compulsory up to the age of eighteen and optionally longer.

The trend of public opinion in Britain is seen also by the action of the Master of Balliol College, who not long ago declared himself in favor of better hours of labor, and provision for entertainment and educational facilities for working men.

The "New Magna Charta of Labor" recognizes the right of a State to require a certain standard of education from immigrants and calls for technical or regular educational classes for workers between the ages of fifteen and eighteen years. This will mean that classes will be provided in every large camp and factory, as there are always a number employed under eighteen years of age.

Extended comings and goings, during the last twenty years, in all parts of Canada, conversing with men in every kind of work, as well as with leaders in industry and education, has convinced the writer that public opinion in the country to-day is in favor of legislation even more advanced than the Smith-Hughes Act of the United States, the British Education Act of 1918, or even that of the New Magna Charta of Labor. It is overwhelmingly in favor of larger opportunities.

Dr. Ira Mackay, Dean of the School of Law in the University of Saskatchewan, in an excellent article on "Educational Preparedness" in the February, 1919, number of the Canadian Magazine said: "If our Canadian national labor organizations will declare a general strike for the purpose of obtaining more and better educational opportunities for our workmen, I shall join the strike to-morrow."

There are engaged on the farms, and in the camps, factories, and works of Canada, at least 2,000,000. How is the fuller education of this great army to be carried on? The answer is of course, mainly by instructors. They should have at least half as many instructors as the specially favored young men and women who attend the parent universities. There are 20,000 students attending the universities of Canada, and 2,000 instructors. If one instructor can be provided for every ten students in attendance we should at least give half this number, say one instructor to twenty engaged in actual work.

Assume that a large proportion of the workers would thus take advantage of these opportunities, and that ultimately as many as 1,000,000 throughout the Dominion would be enrolled as workers, who are at the same time college students, we would require an army of at least 50,000 instructors. Even under present conditions 30,000 instructors could be utilized for extra-mural work. The educational systems of Canada would be rendered a hundredfold healthier by this pruning.

The Universities can supply	8,000	instructors (1,000 from the faculties and 7,000 student-workers.)
High Schools, Collegiates and Private Colleges.	10,000	instructors (from the staffs and the third and fourth year students).
Law.....	500	instructors
The Church.....	1,000	"
Medicine.....	500	"
Experts on the Works....	10,000	"
Total instructors ..	30,000	

Classes would be held in mills, factories, business offices, in tents on construction, in box cars with railroad extra gangs, in log shacks and shanties, and other inexpensive buildings at lumber, fishing, mining, and land-clearing camps throughout the Dominion.

The regular collegiate branches would be taught by instructors from the universities and schools who are also part-time manual workers. Many accountants, superintendents, and managers could profitably bring to the youths of our mills and works a fuller knowledge of trade and business systems. Let the experienced sawyer, the

master mechanic, the mine captain, or any skilled worker who, through years of effort, has become proficient in his craft, be given, when necessary, the function of a professor.

Throughout Canada at least 10,000 such practical experts would thus be available to give instruction. This would bring the number of instructors up to 30,000, and for the 1,000,000 student workers who would take advantage of studying, the ratio of teachers to taught would be 1 to 33. In a short time the number of instructors would be increased from the additional band of new students. The ratio would in this way be brought up to one instructor to twenty workers who under this new regime would be part-time students. This would provide one half the number of instructors supplied students at the parent universities, and give definite and systematic incentive for study at the works.

If the university is to reach the men and women of the factories, settlements and camps, the test of its effectiveness may well be measured by the scope of its extra-mural courses. In these years the university must throw wide its doors. They must give those who study outside, equal opportunity with those who gather in the class-room. That university which, with toss of head refuses to recognize good work done extra-murally for a degree has not yet a proper conception of the place of a

university. Particularly does this apply to any university depending on the public funds of a province for maintenance. In this century the yard stick of the true worth of any Canadian university will be the amount of direct contact it keeps with the outlying parts.

CHAPTER VIII.

EXTENDING THE UNIVERSITY.

The scope of the new university lies in making the university helpful in whatever way possible, and to all the people; not offering courses merely, but including instruction and advice in all places. Its services should be at the disposal not only of individuals, but of municipal organizations and clubs of all kinds throughout the country. It should mean extension and more of it.

There exists in every community a considerable class of persons who because of occupation, age, preparation, or other reasons, are unable to adjust themselves to a formal system of education. These persons having capacity and ambition, have a claim upon the province for educational opportunities outside of the formal regime. Extension courses serve the needs of men and women in this situation and offer effective opportunities of instruction in various subjects which may be pursued in accordance with the requirements of each student at his home or work.

It is the existence of such people in large numbers that has made university extension work possible and necessary. Some are anxious for it because they have had no

chance for a college or possibly for high school education. Others wish still further to broaden their horizon and to increase their general culture; still others realize that only through continual and systematic study can they really progress in their professions.

Bring education to the man, not the man to education. Not only primary, but secondary and university education should be placed within the reach of all. Literature will stand transportation as well as pork and beans. An instructor should be as portable a person as a foreman. A camp-school or school-tent is as easily erected as a cook-camp or bunkhouse. Hugh Miller, in the quarries of Scotland, Alexander McKenzie on the Martello towers near Kingston, Booker T. Washington on Mrs. Ruffner's farm and in the coal mines and salt furnaces of Virginia, are well-known examples of men who have acquired education by taking advantage of opportunities within their reach, even the most meagre.

Universal suffrage necessitates universal education. A new industrial system calls for new educational development, and particularly for the re-adaptation of the universities. They are the weakest links in the chain to-day. The call for practical education has now reached every community in the land. We all realize that education should be in fullest sympathy with the environment. More than ever may it be asked to-day why should all the colleges of Ontario be grouped in Queen's Park, or the

only seat of learning for Manitoba be found on the Assiniboine? Decentralization is the need.

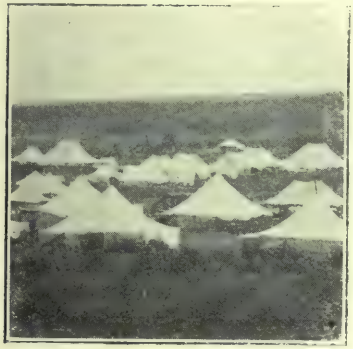
The place of one's education is at his work. Even on pedagogical grounds the reason is evident. The idea should not be separated from the object. It cannot be fully grasped apart from the object. The impression is more than doubled when the two are studied together. Forestry, botany, zoology, mineralogy, geology, surveying, mathematics, and almost every other subject except germs can be studied to better advantage in the light and open. The student of chemistry could not only learn the names of acids and alkalis with a few for ready use, he could also learn to manufacture at will, from plants secured by his own hands, what he required. The formulas used and reactions obtained from such experiments would never be forgotten.

The Government of Ontario is a pioneer in carrying university training to the mining camps. Nova Scotia is a close second. For a number of years a professor from the School of Mining, Kingston, assisted by one from the School of Practical Science, Toronto, under the patronage of the Provincial Government, visited the principal mining camps in the province and conducted a series of lectures to prospectors and miners.

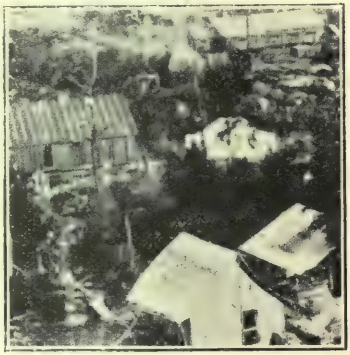
Many thousands of student soldiers have returned within the last two years, and are again taking up their broken courses. The universities have asked for money

Tented Branches of the Frontier College.

Teaching in a Tent School.



On railway construction, Western Canada, 1908.



An end of the Steel camp, Tete Jaune Cache, 1912-13. Frontier College tent in the foreground.

Tent at Hydro Development, Niagara Whirlpool Camp, 1919.
More than 300 tented schools have been conducted by the Frontier College throughout the Provinces of Canada.

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to aid in educating these returned men, but at the university buildings. Is it desired that even they should all be in attendance? Is there not in this a big opportunity for extra-mural work?

The Government is willing to assist returned men on the land. Combine both. Give those who wish land, assistance on the land, and at the same time extend to the land, opportunities of study and of meriting a university degree. Let us give up the old idea that a university consists only of "highbrows," students, and buildings, protected by the flaming sword of a dread and mighty registrar. Rather let us see clearly that teachers and students alone make a university no matter where housed.

By extending their courses, and work and influence to industry in whatever form, the universities can convert the whole industrial world into a university. The late war showed with what alacrity the university could meet an emergency. Let us see less of the frock coat among their graduates.

Thus add to the resources of life, education, and industry throughout Canada. Let the universities in turn respond to the call for increased production. Train, not only the professional man, but also give practical assistance to the farmer and the mechanic, to the employer and the employee, to the student, the housekeeper, the home maker—to all citizens whether in the congested centres or situated on the hinterland of our great Canadian heritage.

Actual attendance on lectures means little to the one who has passed 25 years. More and more it should be possible for students to earn degrees, *in absentia*, from any university; not only degrees in liberal studies, and in science, but degrees granted for practical efficiency in all lines ranging from scientific farming to scientific lumbering and roadmaking. In order to encourage the search for oil for the navy, one of the British universities very sensibly offers a degree to the oil prospector. What university in the Dominion will be the first to recognize courses in grading, laying steel, stumping, and plowing, and all things else, so necessary in the daily life and work of the people?

A college man, W. G. Beatty, a manufacturer of Fergus, Ont., told me recently he fully believes in the education of the company's employees. He would willingly direct the education of his men, but knows that his experience and knowledge of the plant is wholly required to superintend it. As a part measure he has made an arrangement with the Fergus High School, whereby the company's employees will be enrolled as pupils, and the high school teachers will give one hour's instruction daily in the company's time.

Mr. Beatty frankly admits, however, that this arrangement is not perfect by any means, and that if education of the workmen is to be much more than a name, the instructors must know the business, spend part of their

time in working with the men, and all of their time at the plant.

What are the qualifications of the university for work of this kind? They should be foremost in meeting the needs, particularly those institutions in Canada receiving the people's money as provincial establishments. Throughout the Dominion, however, the majority of the universities have made little preparation. Our universities are inadequate owing to their too great detachment from the life of the present, and their insistence on segregation apart from the work of the world.

Is it not true that primarily all universities were bodies of incorporated workers—whether of tailors, of bakers, or of locksmiths? From early times to have wrought seven years in apprenticeship under a competent master was necessary in order to entitle any person to become himself a master. Later in the founding of the universities in Western Europe this idea was adopted. Alas! that in appropriating the seven years of apprenticeship to become a master or doctor in learning, the modern university had not also purloined part of the manual training of the 'prentice trades. To get their academic training men should not doff their overalls. The university at the beginning should have aligned itself with the weaver and the brick maker. The book-case centuries ago should have been set up in the little workshop as well as in the cloister.

Too long have the universities emphasized the courses leading only to a profession. At one time it was the church, then law. Now it is medicine that seems to monopolize much of the efforts of the schools. The time is now for the universities to pay back to the people in other activities a debt long due. Let subjects of practical utility be given larger recognition. Any work, no matter where located, should be an outpost of the university. The settlement should be a homestead college. The walls of any university should be the confines of the frontier itself.

Compulsory attendance at lectures is carried to a ridiculous extreme in most university requirements, even in the matter of enrolling. To be late a few days at the beginning of a term may cost a man his year. Such red-tape, particularly when students are working their way, is both petty and arbitrary. Late in September the Frontier College asked a university registrar to allow a student the privilege of enrolling in the first week of October, instead of the middle of September [1919]. The answer was "No!" Is that meeting the working student half way? It is not to be wondered at that the universities are sometimes seemingly set apart from the workers.

To Cambridge University, England, falls the honor of originating or adapting anew, the idea of university extension.

Before 1661 William Dell, Master of Gonville and Caius College, urged the establishment of universities or colleges in every great town. Dell was regarded as a fanatic and no immediate results came of his plan. But like leaven it ultimately raised up a great body of opinion in its favor. 200 years later William Sewell, a Tutor of Exeter College, Oxford, wrote a letter to the Vice-Chancellor of his university making similar proposals. Although no actual results were apparent, these ideas continued to work in men's minds. Five years later Lord Arthur Herney published a pamphlet entitled "A Suggestion for Supplying the Literary and Scientific Mechanics' Institutes of Great Britain and Ireland with Lecturers from the Universities." It was not, however, until 1871 that university extension took definite shape. In that year Mr. James Stuart, Fellow of Trinity College, Cambridge, addressed to the resident members of the Senate a letter in which he proposed a system whereby circuit lecturers should give courses of lectures wherever suitable arrangements could be made. After eighteen months' consideration this local lectures or university extension system was finally established in April, 1873.

During the next twenty years the idea was adopted by many other universities not only in Britain, but also on the continent and in America. Too long, however, the extension system was confined to lectures only. Members of the staff of some university would deliver lectures

upon request at outside points. This was good as far as it went, but it was largely the educated classes who took advantage of them. It was not, however, bringing the university to the great mass of the people.

Later, in America, where the idea had taken root, not only lectures, but full courses were conducted at outside points, or carried on by correspondence. From this idea grew the extra-mural courses which gave credits for work done beyond the university; thus putting into the hands of men and women who so desired the facilities to study at their homes or place of residence.

The University of Wisconsin in the eighties and Queen's University, Canada, soon after, were foremost to pursue this work. In a very real sense they pioneered the way in bringing the university within the reach of all. The movement has progressed far since 1890. Most universities to-day carry departments for extension work, and a growing number confer credits for work on courses pursued extra-murally.

By this means the university is carried to the people of the small towns and rural districts. Students deprived of opportunity to attend regular classes may enrol in studies ranging all the way from the beginning of high school work to college and graduate studies. Courses are provided in agriculture, home economics, public health, arts, engineering, forestry, mining, sociology, and many other subjects. Some universities send out demon-

"Taking the College to the Man."

A. E. Ottewell G. D. Misener E. T. Mitchell A. L. Carr
The Alberta Contingent of the Frontier College, 1910.

(Facing page 115.)

strators, circuit instructors and lecture trains. Corn clubs and girls' poultry clubs are conducted and co-operative associations are promoted.

All these are steps in the right direction. A great many universities, however, still hold aloof. Until within recent years fully one-third gave no extension work of any kind. While others give extension lectures, their activity is restricted to their immediate city or the suburbs thereof. On the other hand an increasing number of great universities are now giving whole courses of instruction to those beyond the university, and in many cases credits or part credits are allowed for work done in this way.

A questionnaire sent out by the Frontier College in 1914 to leading universities throughout the world elicited the following replies from 100 centres of learning in Asia and Australia, as well as in Europe and America.

In 1914—

30% were giving no extension work of any kind.

41% were giving extension lectures only.

29% were giving lectures and courses.

Six years later the same 100 universities from all parts of the world reported as follows:

In 1920—

18% were giving no extension work of any kind.

30% were giving extension lectures only.

52% were giving lectures and courses.

More remarkable, however, is the changed attitude in the six years, in the matter of work done extra-murally.

In 1914 only 17% of these universities gave credits or part credits for work not done in actual attendance, while in 1920 35% gave credits or part credits for work so covered.

Only two universities, Glasgow and North Western at Evanston, Ill., had discontinued their extension work.

All this shows a marked tendency to broaden the activities of the university. More than ever it is being recognized that higher learning may be advantageously pursued in local centres not convenient to universities.

As already mentioned, Queen's blazed the trail in Canada in what is real university extension. In 1891 it undertook to place in the hands of *bona fide* students who passed the matriculation examination, typewritten copies of the same lectures as those delivered to intra-mural students. By questions requiring answers that involved close study and independent research it succeeded in making hard workers of all its non-resident students. These lectures were taken advantage of by men and women in every walk of life and in different countries of the world. Queen's examinations have been held on ocean liners on the seven seas. The writer knows of one who wrote on an honor examination in the redwoods of California.

That Queen's has not lowered her standard to do this, and that she has accomplished a great service may be gathered from an address by the Hon. Dr. Cody, former Minister of Education in the Province of Ontario, at the installation of Chancellor Beatty and Principal Taylor, in October, 1919: "The quality of work done by Queen's University is second to none in Canada. In scholarship, in practical efficiency, and in professional success, Queen's graduates compare favorably with those of any other university on this continent or within the Empire. Approximately 40% of the high school teachers and school inspectors of Ontario are Queen's graduates."

Queen's has set an example to her sister universities of the Dominion. Any university, wherever found, must grasp its opportunity of giving credit toward a degree for equal work done extra-murally. The university must widen its horizon. Particularly must the workers share in its benefits. Extension courses, splendid as they are, go but half way. There is still one thing lacking, that is the presence of a goodly number of university men as workers and teachers at factories, camps and settlements.

This would probably result in fewer literary junkers, but in more Wordsworths to awaken us to the joy of nature; more Bessemers to endow the world with some new process of improving the value of ores; more Stephensons, Watts, and Wrights to create new means of transportation and eliminate war by making every man our

neighbor; more rail-splitting Lincolns to strike the fetters from the slaves of every color and race and tongue; more Edisons to harness other powers of nature now mysterious and untamable. Thus teach the world to laugh and sing.

We expect much of the universities. Let their aim be, to reach all classes, rich and poor, men and women, city and settlement, student and navvy, and woodsman—comprehensive as the church itself.

CHAPTER IX.

THE INSTRUCTOR AT HIS WORK.

Such, among others, are the problems which confront the universities. But is there a solution possible in actual practice? There is: and the medium is the resident instructor. To carry the university to the worker a new kind of teacher is needed, a man whose hands are trained as well as his mind and soul, and who possesses that intangible quality which gives leadership. He must be a university man who can satisfy not only the foreman with his daily work, but can awaken enthusiasm in a gang of men. The instructor is a by-product of our halls of learning.

The man in the camp lives in the present, not in the past, and his soul responds most readily to the concrete influence of one sharing his environment. Nothing but efficiency appeals to these men—efficiency, not in mathematics or literature, or theology, but in actual labor of the hands, and in their particular brand of manual labor. It is nothing to them that one has taken a double-first in any one of the colleges, or even won renown as a pitcher, catcher, or half-back on the campus. To be personally popular with the shantymen one must handle the cant-hook with any of the old-time loaders and

skidders. The river-driver's standard of character is ability to handle the peavy, ride a log and break a jam. The miner judges a man by his ability to drill holes and handle dynamite. The fisherman respects the man who can manipulate his nets and trim his sails in the roughest weather. The student who would win the frontier toiler and help develop his mind and soul must first be his hero; he must excel in the special work of that laborer, whether on the river, in the woods, the rock cut, mine, or right of way. He must prove that his all-round education of hands and mind and soul has made him more contented, happier and more efficient than those whose hands and feet have been over-worked while their minds are dormant.

Thus can the undergraduate, graduate, and professor from the university be brought into closer contact with the men of the factories and mills, with the miner, the navvy, and the fisherman of Canada. A land such as ours, with its diversified resources, should require of its university students and teachers that they have more intimacy with these frontier works.

If one fights shy at digging-in, in good manual effort, he is not the type to be an instructor. No favors are asked and few are granted. Sometimes the hard going proves too much for the college man. Nevertheless he should himself engage with them in manual work. A light clerical job is not best. There is a certain prejudice against

men who do not engage in the regular routine of the work in hand. There is danger of being classed with the several parasites who shadow the workmen for the sole purpose of exploiting them. Even a welfare agent may come under suspicion.

Do we stop to consider the value that some place on even the barest minimum of education? What struggles some have made for just that little learning which a resident instructor can so well impart! Extended experiments, in many phases of frontier education, have shown me that branch colleges are not only practicable, in most camps and works, but they are much desired by the men themselves. Their scope, however, must necessarily be restricted in many places until the conditions of employment improve. Particularly is this true in bush camps in parts of Canada. The strenuousness of the work and the exacting day of long hours are a handicap to regular classes. Youths and men so situated, despite often an anxiety to learn, have not sufficient vitality left for actual study.

Nevertheless, the isolated bush camp is the very place a branch college should be located in the person of a university instructor. In few work-groups throughout the Dominion is there greater need of constructive and healthy influences. While actual attendance on classes may lag, the practical work of an instructor may well be in evidence in half a score of ways. His manual work,

yes his skill, for example with bush rigging, gives him the confidence of the workers about him. In the skidding gang, the cutting gang, or in the noon-hour group, he unconsciously assumes leadership. He becomes a factor in the camp, for he is the free information bureau, acting locally in the broadest interest of his country. With no commissions to exact, he stands for concrete citizenship. His spirit of reality and sincerity imparts the flavor of unselfish stanch Canadianism. To fill such places we must have the best from the schools and the universities of the Dominion: men willing to engage in manual work, yet at the same time broadly fitted with the higher principles which give meaning to our institutions.

The letter of a camp school inspector written in 1911, after a visit with an instructor at work on railway construction in northern British Columbia, gives an idea of what wholesome contact may do in this respect:

"Coming into the camp, I was directed to the tent where the instructor bunked along with four or five other laborers, and soon I greeted my chum. In appearance there was nothing of the college man about him. At sight no Alma Mater would have claimed him. Without doubt, nobody who had any acquaintance with students would have supposed that two months previous he had carried off a scholarship in philosophy. The fellow I greeted was a navvy pure and simple, and he certainly looked the part. During my stay in the camp,

Lady graduates and Frontier College work.

Miss Isobel Mackey, M.A., acted as welfare and educational agent for the Frontier College in a Prairie Community, 80 miles north of Regina. Miss Miriam Chisholm, B.A., assisted by Miss Marjorie Wickwire, engaged as machine workers during part of the summer at Clark Bros.' factory, N.S.

The Frontier College in a clothes-pin factory.

(Facing page 122.)

however, I learned that the influence of the college had exerted itself even among mule drivers, scraper-holders, graders and ditchers."

At these times, too, more than ever the university woman must give fuller heed to certain duties too long neglected. Community service has daily widened its fields of usefulness. When will the woman graduate see that with her mind enriched partly at public expense, and with her broader vision, she has an obligation to go for a time—not just as a supervisor and welfare agent—but as an actual worker and teacher in the shirt factories, the cotton mills, the crowded offices, or where, amid machinery and clatter of activity, women workers, too often lacking her acquirements, are herded together. The woman graduate, as such, who is continuing her studies may well receive credits toward her degree on her manual work, as she strives for a time to make more wholesome the lives and outlook of those whose days are spent in sorting and parcelling, in sewing a garment, or tending a loom. If misguided youths in camps need the presence of the university instructor, even more so does the conversation of a band of girl employees in a mill-group need direction. Too long have women graduates left the leadership in such matters to minds less fitted to guide.

Where, too, is greater need for the woman graduate than in the prairie hamlets? The settler's wife and little

family, in their lone shack, need the presence oftener, the practical help, and the cheer of the university-trained woman, particularly if that one can assist in every phase of activity in such communities. She must be able and willing to do actual work in a kitchen, give culinary assistance, or spend an hour or two at a sewing machine, as well as teach. Much may be done, too, in giving illustrated lectures to assembled groups in schoolhouses, and in proving a leader in all wholesome amusements and social gatherings, which tend to brighten the life of those thinly settled districts. The woman graduate can do her part, both as a manual worker and instructor.

Nor need healthy sport be overlooked. A wide-awake instructor located at a saw mill town in New Brunswick where about 250 men were employed, seventy-five per cent of whom were foreigners—Rumanians, Poles, Swedes, and Danes—not only conducted classes four nights a week, but organized an athletic association, with a large membership of men, women, and young people of both sexes. Baseball and tennis, especially, were encouraged. Passing the grounds of an evening one might see a scene surpassed only in cities and large towns. There were as many as three ball teams, as well as other forms of amusement, the instructor directing all the activities.

College instructors at the various camps may well co-operate with the parole officers of the Dominion. As preceptors they can become the big brothers to some lads

allowed out on suspended sentence. This has frequently been done. Such boys are sent to a camp or work where an instructor is employed. They report regularly to the instructor, who also takes a personal interest in his protégé to teach or otherwise help him. This arrangement is known in the camp only to the manager of the works and the instructor—thus no prejudice is aroused as a barrier to the experiment. It is the practical application of the "gospel of a fresh start." Why should the student from the university not participate in such work? If on him has been heaped an environment of culture, let him in turn reflect some of it to the life of another not so fortunate.

A few years ago there was brought to my notice the case of a young man serving a sentence at Kingston. He had been sentenced at the age of 13 by an Ontario magistrate, to four years with hard work. The cause: he had been engaged by a farmer at $5.00 a month. When he quit, the farmer refused to pay him unless he stayed full six months. The boy stole $2.00 and a paltry trinket to make up for $5.00 and left. Later he was arrested and sentenced "to make an example." That lad, scarcely 14, served a year and a half breaking stone, 10 hours a day, at Kingston. When his term was partly over he was placed in charge of a camp instructor at a large mine plant in northern Ontario. There he had contact, not with a taskmaster, but with a splendidly physiqued

university undergraduate who not only taught him (for he had not passed the 4th book), but studied him, with the purpose of discovering his weaknesses, and his particular abilities, and of assisting him to find some interest in life and work which might lead him away from crime.

The war came on. Along with thousands of others from the camps of Canada, this young man of 18 tried to enlist. He was twice refused, but finally got as far as Camp Borden. Again he was turned down. Some months later he crossed to the United States, and was accepted at a military camp in Kansas. He crossed the Atlantic, landing with a division of regulars, the first American troops in France. He was in active service from November, 1917, till Armistice day, 1918. Later he crossed the Rhine with the Army of Occupation, being stationed at Coblentz for several months. He was discharged in mid-summer, 1919, and is again in Canada engaged in mechanical work, and is studying in the evenings to prepare himself for matriculation. He is a fine type of manhood, well set up and filled with the purpose of making good.

Thus does the trained instructor prove his place, not alone as a teacher at the works or camps and as a demonstrator in the settlements, but even as a preceptor to boys on parole. His work cannot be reported; it is limitless. He lives not for himself, but for others. Life, and daily contact and influence, not words, count in his battle.

This is no child's play, no sinecure for a summer's vacation. It is a very real phase of university effort. Only in such ways can labor and life be grooved aright, and happiness become our common portion.

CHAPTER X.

THE INSTRUCTOR AS A CANADIANIZER.

Thirty years ago you might as well have looked for a needle in a haystack as for a foreigner in our frontier camps. You found there the sons of the Canadian homestead and the farm, as well as the English, Scotch and Irish immigrant. But our neglect of the frontiersman has driven the English-speaking men back from the first line to a seemingly more favored position. They have retreated to the older settlements, where they find better sanitary conditions, and more opportunities for giving schooling to a family. European races, men with an alien tongue, have taken their place in the camps.

One great problem for Canada to-day is how to assimilate this diverse foreign population, not in camps alone but also in settlements, and urban centres. In our opinion this can be done only by a sounder and more up-to-date policy that will align the universities of Canada into more active participation in an organized effort to meet the need. One solution, as already outlined, lies in the presence of university instructors at all works employing fifty or more foreigners.

We must meet the foreigner at his first point of contact with our civilization. We must educate him to our

Canadianizing in a Mining Camp.
J. W. Noseworthy and his class at the Hollinger Mine, 1914.

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standards both at the frontier and on the homestead or one of two alternatives confront us: either we shall see him go back to Europe taking with him money that had better be put into use here; or worse, drift into the hovels and overcrowded tenements of our towns and cities.

All industrial education rightly includes courses in citizenship. Nowhere is this need more apparent than in the frontier works and extra gangs. What does instruction in citizenship involve? We mean by it, instruction in civics, in social rights and responsibilities. Our foreign-born workers are entitled to the education which will enable them more fully to understand what their rights are and how to secure them, and at the same time what are the attendant obligations and how to observe them.

Through the instructor the foreign-born workman must be taught to read and write the English language—the language of the majority in Canada. They must know the framework of the Dominion and Provincial Governments, the relation of the provinces to the Federal Government, the duties of the chief officials in the Dominion; and the limits of authority of elected bodies, and of Parliament itself.

They must know something of the geography of Canada: its provinces, its cities, its resources and extent. They must know the outlines of the history of Canada; its growth, its development, the struggles of its people for responsible government, the accomplishment of con-

federation and the growth and later development of the Dominion.

They must know what are the Canadian's ideals, in this Western continent. They must be shown that Canada is in a real sense a democracy, that the Government here is for all the people at all times, and not for any one class. Through the instructor they must be inspired with an intelligent resolve to preserve it at any cost alike from plutocracy or from mobocracy. They must learn what government can do and is doing for them and what they can do and must do for the government; to subject their appetites, their passions, their prejudices, their self-interests, to their reason, their conscience, and their will. Men and women who cannot govern themselves cannot maintain a self-governing community.

It is well that we should appreciate properly the work of the instructor, not only in the practical teaching given to adult workmen at frontier posts, but in his efforts of moulding and directing national tendencies, ideals, and characteristics.

We must have a common union of all races in the building up of Canada. We do not want a second "Balkans" here north of the Great Lakes. Let each race bring into the common life of Canada all that is best of its own.

The war brought the United States up against the fact that within its borders were nearly 10 million persons

over 10 years of age who could not read a simple announcement in English. As voters in national affairs the ballots of these men, when of age, could outweigh the combined influence of New York, Chicago, and Philadelphia, the three largest cities in the Republic. In the city of New York in 1915, more than 55 per cent of the voters were foreign-born. In that same year, taking 23 cities, with a combined population of 25 millions—one quarter of the whole union—over half the male voters were foreign born.

So great has been the need felt in the Republic that the Government at Washington has compelled the various states of the Union to enact a law requiring instruction for not less than 200 hours per annum of all minors more than 16 years of age who are unable to speak, read or write the English language, until such minors have attained an equivalent of the third grade. We in Canada may well consider the advisability of similar measures, at least outside the borders of Quebec.

Canada has in a smaller way the same problem of illiteracy on the part of non-English-speaking aliens. In the larger eastern cities, and throughout the West, there are many thousands of persons who cannot speak, read, or write a word of English. They live in colonies and have no prospect of becoming literate in English, unless the Dominion Government steps in and compels them to learn.

The experience of twenty years in camps has shown the Frontier College that the foreign-born have a tendency to cling tenaciously to their native language press. Nor is it an inconsiderable factor; there were published in Canada in 1915, forty-one non-English or non-French newspapers and periodicals, the circulation covering a constituency of nearly 800,000. These must be regulated but not entirely repressed. They may be made to serve as channels for disseminating information which the foreign-born need in order to adjust themselves to Canadian life.

The work of the Canadianization of foreigners will require close supervision if it is to be well done. Its organization and direction at many places must be put in charge of an instructor who is possessed of a strong desire to render a worth-while service and yet realizes the full import of the work from the standpoint of both the foreign-born and the native-born. He must command the respect of his fellow employees. He should be a man who has broad sympathy, practical education, executive ability, a knowledge of the background of the foreign-born, and he should be tactful, and a consistent and persistent worker. Who can perform this better than the university man or woman acting as an instructor, whom they have learned to know by contact in the day's work?

The contact and efforts of the instructor serve to bring about a more sympathetic understanding of the foreign-born. A foreign-born workman should get his first ideas

Ready for a class of foreigners. Tent of Frontier College, 35 miles ahead of the steel in New Ontario, 1912.

The Instructor with a C.P.R. Extra Gang in Saskatchewan, 1907.

The Instructor in a noon-hour group. "The worth of any instructor is the sum of all his activities throughout the whole day."

of life and ideals in Canada from the trained mind of an instructor, not from the forceful expressions of a straw boss, or foreman, on a work. An effort should be made by native-born Canadians to discourage the use on the works of insulting names and remarks regarding foreigners. It is a small peg, but in many a remote place much may hang thereon. Prejudice, race-hatred, and petty tyrannies in local places should disappear in a broader effort for wholesome Canadianism.

Where men are taught English by trained instructors, using the direct method, and where the lessons deal with subjects immediately connected with their daily experiences it has been found that within three months a good working knowledge can be acquired through attendance at classes three or four hours a week. But the adult foreign laborers present a difficult problem. In dealing with them, the task is far greater than the mere teaching of English or French, although that in itself would be worth while.

The great majority of our non-English-speaking residents need urging. Especially is this true if they are illiterate in their own language. There is a diffidence, too, among men with regard to attendance on classes after having reached middle life. Many will not bother to go if it takes them out of their way. To meet these objections the instructor must at times hold classes wherever a sufficient number of non-English-speaking people

may be gathered. Instruction may be given in the bunkhouse, in the boiler rooms, and at times special classes may even be held on the working of intricate machines. At the large industrial centres apprenticeship classes may be instituted among the foreign-born. Even after being granted citizenship, under present conditions many a foreign-born voter requires careful supervision.

A brief reference to Appendix B will convince the reader of the need of a thorough Canadian to act as teacher. In a bush camp of less than 80 men as many as eight nationalities may be represented.* The question arises: what blend of Canadianism will result from the moulding of these diverse racial characteristics.

There are many material advantages, too, for the foreign-born workman who learns to speak intelligent English. Figures gathered among the large firms of several States of the Union show that the non-English-speaking employees suffer over twice as many accidents as the English-speaking foreign-born. What is the connection between being able to speak English and being out of work? In one of the large American cities in 1915 it was found that more than 60% of the unemployed could not speak English.

Then, too, in a commercial sense Canada has need of alertness in this matter. The demand upon Canada for years will be capacity production, which must be brought about by raising the producing power of the workmen.

*See Appendix B.

One of the most important factors in this regard is a working vocabulary of English. Cannot the employers of Canada see that by the foreign workman learning English, even if the larger aspects of the question be left out of account, accidents are reduced, output is increased, and many unnecessary differences are avoided.

What an incentive to the learning of English would be given if it was regarded as a part of the day's work. A period of 40 minutes might be given to those using such time to proved advantage for the company. The results should prove remunerative to the company as well as to the men.

Classes for teaching English to foreigners may be held in frontier camps as satisfactorily as in department stores and in factories. In fact, from long experience the Frontier College has found that the attendance on camp classes, relative to the number of men in camp, is higher than the attendance in large urban centres. Some American cities do not report more than 3,000 in attendance at night classes, out of 50,000 non-English-speaking aliens, only one in 16 or 17 taking advantage of classes.

Experience has shown that in frontier works from 15 to 25 per cent of the men will use the night school for classes and general improvement. This is not true in every case, but is the general result where conditions are not overbalanced by near-by attractions. In some classes in English, held in camps and extra gangs, both father and son have sat on the bench in the same class.

It is better not to employ teachers of the same nationality as the class being taught. If for no other reason let teachers of Canadianism be Canadian-born, for at least a generation back. Too often in Canada foreign-born teachers are being employed whose acquired Canadianism is offset by a background of foreign traits, not wholly eliminated. Those who live and dwell in foreign settlements of their own race in Canada are not ready to be healthy Canadianizers. They are to all intents and purposes still rooted in foreign soil.

No permanent license as a teacher should be granted to any one who is not a British subject by birth. While permits may be given to bridge temporarily some need, Canada is acting short-sightedly in allowing her youth to be taught by other than thorough Canadians.

Classes should not be held at the expense of the men. Rather let men get credit for actual attendance. Let them be allowed the hour by the firm, when it is properly utilized. If not this, could not promotions at a plant or works, be made, other things being equal, always keeping in view the amount of progress made in acquiring English?

Where an instructor has been given every opportunity to make good, and where the experiment of teaching English to every foreign-born workman has been tried in industry, it has been universally proven to be a good investment in dollars and cents. It not only promotes

safety and increases efficiency, but the instructor is the translator, by his life, of Canadianism to these strong-limbed new-comers. Most adult foreigners appreciate disinterested efforts to help them. Their descendants, when trained in the schools of Canada, may well do credit to the Dominion.

It is also essential that new-comers to Canada should learn to carry on, in co-operation, the government of a free people. The fundamental principles of representative government, our present system of majority rule, and the obligations embodied in citizenship, must be fully understood. Let the framework of our institutions be laid bare for clearest inspection and fullest understanding.

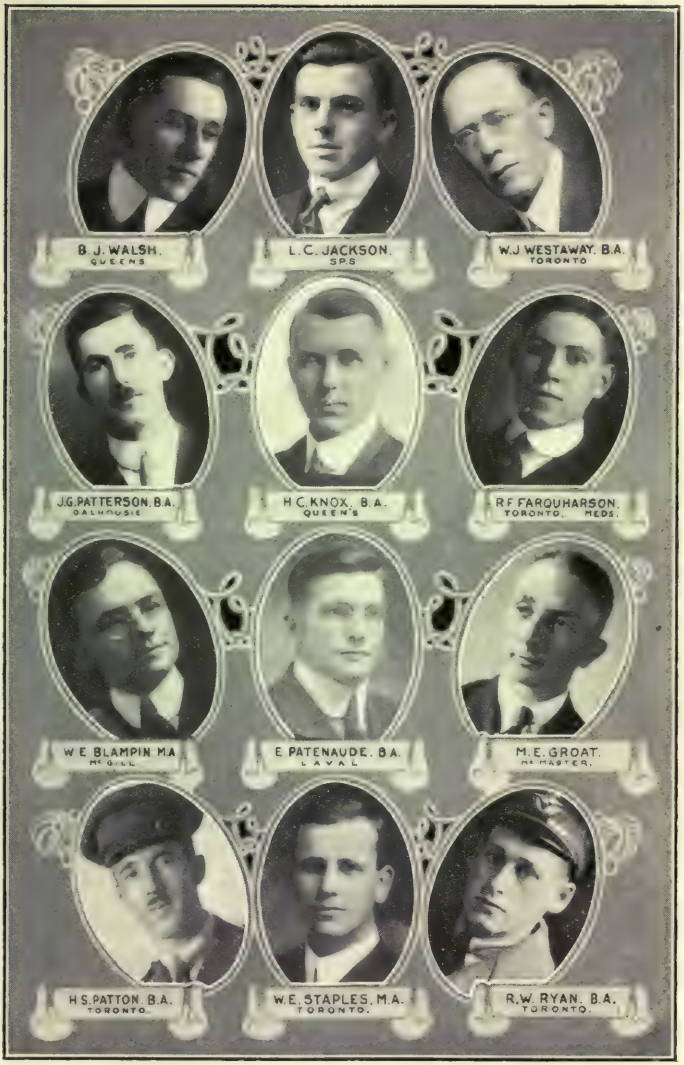
The principles of representative government are supreme. They are being secretly and openly assailed by insidious propaganda. Patriotism must be imparted. Free speech should not be crushed, but the loose talk of demagogues must be matched with the trained thought of the schools. Surely, this in itself merits the support of every thinking man and woman who holds the interest and good name of our country at heart, and to whom the present menace of unrest is more than a mere passing cloud.

Nor would the barring out of immigrants as a safeguard against the spread of such doctrines be the best policy for Canada to follow. This country needs all the people it can get who are willing to work, especially on

the land, and all who are anxious to become good citizens. There is room in Canada for millions more, but there can be no hardship to anyone in the adoption of a policy requiring that the new-comers shall, as far as education can make them, become Canadian citizens in spirit as well as in name.

Another thing must not be overlooked. The problem of the camps and bunkhouses to-day throughout the Dominion does not concern the foreigner alone. Some mines are 90 per cent English-speaking, and yet one finds often at such camps the greatest amount of grouch, unrest, and discontent, which bides only some trivial thing, to break forth in demands and threats.

What is the reason? It is not just the foreign-speaking worker who is to blame. For years back, especially in the mines and camps of the west, all kinds of loose talk from agitators on economic subjects has gone unchecked among the masses of workers. Leaders with ability among both the English-speaking and foreign workers, unchallenged, have exaggerated and perverted facts basic in economic truth. The result is that men in the camps have come to accept their viewpoint, lurid and grotesque as it sometimes is. If one doubts this let him work a couple of years in just such surroundings. Not only must the foreigner be Canadianized, but demagogues of native and of foreign birth must be answered when they indulge in unfounded talk and reckless half-truths.



"The combination of university-man, manual worker, teacher, and leader."

A part of the staff of 56 employed by the Frontier College during the summer and winter seasons of 1920.

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If we ask that leaders of labor become intelligently cognizant of economic theory, we should also demand that no professor in a university occupy a chair in economics or social science who has not labored with his hands for several years after reaching the age of 17. The condescending acquaintance with a factory or camp for a few hours' "investigation" does not fit even a professor to know the needs of men. This does not give him first-hand information.

The best means of guiding and controlling this social unrest is the right type of instructor. The right type of instructor is a man who can fit into the many requirements of camp life as well as if not better than the walking delegate or professional agitator.

It is well, too, that the instructor should have a knowledge of the principles of economics and of social science. He should be familiar with the current Marxisms, perverted forms of socialism, and misleading half-truths. A partial remedy would be the appointment of special lecturers who would visit these gangs of workmen, conduct open discussions and distribute literature dealing with these problems in as popular a form as possible. This, however, would be inadequate. No half measures will permanently allay the unrest in camps and works. After all it is good hands and the use of tools, scholarship, sympathy, and altruism that count, rather than the ability effectually to explode the false theories pro-

pounded by the red agitators. Schools and schoolmasters are the only absolute remedy.

The university must stand sponsor in this country for a healthy Canadianism. Have we not a right to ask that half the professors and half the students give part of their time in manual work at camps, works, extra gangs, and industrial plants throughout the Dominion? If, instead of a few score or a few hundred, the universities could return each year five thousand of their choicest students to the mills and mines and works of Canada as instructors, what would their presence and influence not accomplish?

CHAPTER XI.

THE FRONTIER COLLEGE.

During the long years of the war, the people of Canada followed with admiring interest the movement inaugurated to extend some of the benefits of the college to their soldiers overseas. Surely the intellectual tone of that nation was high which could thus keep in mind that her sons in uniform were something more than mere automatons sent to do her bidding against the foe. Yet the underlying idea of khaki teaching was not new. For fifteen years before the outbreak of the war such efforts had been put to actual test by the Frontier College.

In the ranks of another Canadian army, and one quite as large as that we maintained in France, a body of teachers have been quietly working. That army is the frontier and industrial laborers of Canada, employed in the lumbering camps and other works of the Dominion. In the battles of the forests and the mines the instructor of the Frontier College has kept step in the ranks.

The work of the Frontier College is more or less familiar to readers throughout Canada. Its experiments in education for the camps and frontier settlements have been carried on in all the provinces, except in Prince Edward Island. It has endeavored by actual experiment to find

out how best to provide an atmosphere that would at once furnish educational facilities for the workers, and be an incentive to higher things.

Through the efforts of the Frontier College, some of the gaps between the schools and the universities on the one hand and the camps and mills and works on the other are being gradually bridged. The work of its instructors is an indication of sounder growth in matters of education. It combines in juster proportions, some of the discrepancies of opportunity still evident in our systems. The development of sense organs in physical work will supplement mental development when both are duly balanced.

Nor is it impossible to take the college even to the camps, and frontier settlements. Since 1900 nearly forty log buildings have been built in various camps on the north shore, as branches of the Frontier College. These serve the purpose of camp school, library and recreation centre, plus the personality of a university man as an instructor. Many of these were built under handicaps and often with little co-operation from lesser officials among those whom they were intended to serve. But through the tact and practical worth of a proved instructor trees have been felled, the frame put up, the roof boarded, the walls "chinked" and "mossed," doors and windows put in and the whole floored with poles if lumber could not be had. These when fitted up with tables and

benches have supplied the centre for the activity of an instructor—herald, we hope, of the time when more and better buildings of the sort will be erected at each large set of camp buildings which are to serve for a year or more.

On railway construction, at development plants, in the mining country, out in the Yellowhead Pass, at Abitibi, in the Porcupine region, in the Peace River country, or in Northern Quebec and New Brunswick, tents have been toted and packed some of them for great distances, and all with the purpose of bringing to frontier places and works some of the advantages too long denied those at the front. More than 300 tented schools have been conducted by the Frontier College at points as distant as the confines of the Provinces. Along the main lines of the Canadian Railways, scores of box cars have been refitted and utilized at sidings to serve the needs of extra gangs and bridge crews. Cars and frame buildings have also been used on the logging roads and in the camps of Washington and British Columbia.

Often the magazines, books and other reading matter used in a branch college have been "toted" by winter teams for forty, sixty, and even one hundred miles to be at the disposal of the men during the busy summer months, when the camp work of construction proceeds apace. Tents, and supplies, have been taken where the only means of travel for days was the tortuous river in the north, with its rocks and rapids and attendant portages.

During the twenty years of its experiments about one hundred thousand men have had the privilege at times of a night school and the healthy incentive of a resident instructor, many foreigners have learned the English language, and one hundred and eighty thousand men have had a chance, through access to good literature, to live in decency and keep in touch with the outside world. These centres thus afford not only a measure of refinement and uplift for manual laborers, but also healthful, broadening training of the most practical kind for the college man himself.

Once upon a time men laughed at the idea of night schools for camps. It was visionary; it was impracticable; it was anything under the sun that has been said about every other idea that has been new to the time. As a matter of fact one does not need to be a deep student of history to know that it required long years of effort to establish the principle, not only that every child is entitled to an education, but also that it is to the interest of the state to insist that every child shall have an education. Having accepted this principle, our provinces have built up educational systems, more or less imperfect perhaps, but still constantly tending toward improvement.

The night school was the logical outcome of the day school, and should be an integral part of the activities of all works and camps. The private business colleges were

among the first to realize the fertility of this field, and possess themselves of it. The fact that the number of these commercial schools has increased rapidly and is still increasing, offers positive proof that supplementary education as represented by the night school is quite as necessary and justifiable as the primary education of our public schools.

But the question may naturally arise: Does the nature of the life lived in frontier camps make possible the holding of classes for the imparting of systematic instruction? What are the results in actual teaching? As already indicated in the previous chapters the full measure of the worth of any instructor is not obtained from judging only the size of his classes. His opportunities are manifold and his value must be considered as the sum of his various activities. That very real results, however, may be obtained from the actual class instruction will be evident from referring to Appendixes C and D. The first gives a summary of the classes held in a moderate-sized winter camp, largely English-speaking, and under all the drawbacks of the sleigh-haul and the long work-day. The second shows the results of the efforts of an instructor at teaching in a summer camp on railway construction and with mixed nationalities.

The holding of classes in camps is naturally divided into two distinct phases, the one dealing with English-speaking men and the other with foreigners. In handling

the first of these the instructor's tasks range all the way from elementary work amongst the absolutely illiterate, of whom unfortunately there are only too many in the camps, to tutoring for matriculation. In the matter of teaching foreigners, another method is adopted. Experience has shown that the methods outlined in the Handbook* give the best results; but, as the reader has already inferred, the instructor is always teaching—his life and daily contact are his channels of approach. No foreigner, even if illiterate, but can receive benefit from the practical suggestions and assistance given by the university man working at his side.

While emphasizing the hopeful and encouraging aspects of Frontier College work, we must also mention some difficulties that confront the instructor during the summer. Most construction camps are situated so far from any town or depôt that it is extremely hard to obtain lumber for tables and benches, and many of the students have the utmost difficulty in accommodating the men and making the tents comfortable. Again the transient nature of the construction gangs is a great detriment to the educational efforts of the pupils. Very often an instructor is much discouraged because some of his pupils either had "jumped the job" or were suddenly discharged. It sometimes happens that when an instructor looks for his class at seven o'clock in the evening, he finds that many of them are ordered out after supper, or

*Handbook for new Canadians. Ryerson Press, Toronto.

that those of them who are left are too tired to go to the night school, even though it may be but a couple of hundred feet distant. The conquering of the difficulty then depends on the popularity and ingenuity of the instructor.

Apparent failure often arises, too, from the inexperience of a student instructor. Whilst most students are zealous and enthusiastic, some do not know how to deal with the particular class of men that frequent camps and works and are unable to win their interest and sympathy. The men needed for this work must be capable of roughing it, able to adapt themselves to any conditions, not afraid to associate with men who appear to be intellectually and socially their inferiors, and above all, unafraid at all times and under all circumstances to adapt themselves and their methods to their fellow-workers and their particular needs. If an instructor is of this stamp his work will be an unqualified success.

Then, too, there is the opposition still to be encountered from some of the companies who through a local foreman give little support to work considered by some of them to be a needless innovation. The principal objections to the education of their men on the part of such employers are: (1) That the men are shiftless, that they have hereditary taints, that their troubles are largely biological in origin and therefore incurable, and that they have no desire to rise above their own level or acquire an

education; (2) That the nature of their work is not conducive to study.

In answer to these objections it may be said that a good ancestry is unquestionably very important. Prof. Galton in "Hereditary Genius," shows from many examples that as a rule the sons and daughters of the good and great are themselves good and great, while the descendants of the vicious are degenerate and profligate. This is no doubt true, but a good environment in the former and a bad one in the latter case was largely the cause of their respective conditions. In fact, science has fairly well demonstrated that environment, like "simple faith, is more than Norman blood." Mr. Lester F. Ward, in his "Applied Sociology," clearly proves that genius is as common in the laboring class as in the so-called higher orders. Then let us aim to put opportunities of education within the reach of all.

The Frontier College has not only preached this doctrine, but has endeavored to put it into actual practice through the presence and work of a resident instructor. To 500 such instructors, many of whom have served for several years, I must give the fullest credit. At six hundred locations throughout the Dominion, in the last twenty years, they have proved the merit of these experiments by tackling the problem at first hand. Every university in Canada has had graduates or undergradu-

Part of the staff of instructors for the Frontier College, 1913.

1, S. A. Fasken; 2, Gordon W. Doolittle; 3, Fred Baragar; 4, D'Arcy Prendergast; 5, R. C. Bennett; 6, Alex. Turnbull, B.A.; 7, J. E. Gray, B.A.; 8, C. V. Perry, B.Sc.; 9, Chas. Glover; 10, D. A. Lane; 11, H. E. Magee, B.A.; 12, H. R. Rutherford; 13, F. Abbot Wood; 14, J. R. Howitt; 15, D. L. McDougall.

(Facing page 149.)

ates in the camps as instructors for the Frontier College. Their whole-hearted purposes, their zeal, their sacrifices at times, have paved the way for fuller recognition of the need of this work. These men have carried on a work patriotic in its essence, but not spectacular; for the most part, beyond the beaten paths, where there are few to see or record the quiet heroism of men who love their country, and are willing to serve without praise or reward.

In his admirable book, "Building the North," assistant chief Provincial Inspector J. B. MacDougall, M.A., D.Pæd., in referring to the work of the Frontier College, says of its instructors: "They were usually men of larger culture and experience, if less versed in technical method, than our carefully schooled and certificated teachers. Instructors they were called, for their tasks were broader and more practical than those of the ordinary teacher."

Among the list of names appended* there are those who since have made good in medicine, in law and in the pulpit. Two or three of the real big jobs of the business world in Canada are held by men who as instructors worked and taught in camps. Many former instructors are now lecturers and professors in Canadian universities. The question arises, were their camp experiences any handicap?

Rather, was not the human touch, the mingling with their fellows in common toil, a greater incentive in their lives than that which comes from books alone?

*See Appendix A

The instructor who by his life and daily contact seeks to impart useful facts to those in camps and other works is truly a welder of social life; he is in the highest sense a nation builder. He is the concrete example of the university in overalls. These are the teachers of the frontiers. They are the high priests of the broadening culture of our times. There is need for such at every outpost of our national life. The instructors of the Frontier College have blazed a trail in education throughout the Dominion that promises to become one of the highways which lead to a new and a better Canada.

APPENDIXES

APPENDIX A

350 of the 500 university men who in the last twenty years have acted as instructors for the Frontier College, at more than 600 points throughout the Dominion. Of this number sixty-three were already graduates of recognized universities when they engaged in manual work as instructors. This experiment has been carried on not only in Canada, but to a lesser extent in the United States. Graduates and undergraduates of Harvard, Cornell, Dartmouth, and Chicago Universities have acted as instructors for the Frontier College, some of them at points in the United States.

Instructors	University	Faculty	Location	Year	Work
Abernethy, Wilson	Univ. of Tor	S.P.S.	Roberts Lake Camp, Rock Bay, B.C.	1920	Logger
Agabob, W. J.	McGill Univ.	Arts.	Moore & Pethick, Camp 65, Duncams, Vancouver, B.C.	1913	Laborer.
Albee, A. D.	Dartm. Coll.	Arts.	Hydro-Electric Power Com., High Falls, Ontario	1919	Handyman.
Ansley, J. W	Univ. of Tor.	Arts.	G.T.P. Const. Mile 137, Alta.	1912	Navvy.
Appleton, S.	Univ. of B.C.	Arts.	Knowles & Thompson's Camp, Vancouver Island, B.C.	1911	Laborer.
Armstrong, G. W.	Univ .of Tor.	Med.	C.N.R. Extra Gang No. 1, Port Arthur, Ont.	1919	Navvy.
Avison, Douglas.	Univ. of Tor.	Med.	Abitibi Pulp & Paper Co., Iroquois Falls.	1916	Night Watchman
			Imperial Oil Company, Dartmouth, N.S. [Part season]	1917	Timekeeper.
Baker, L. L.	Univ. of Tor.	Med.	C.N.R., St. Cuthberts, Que.	1919	Navvy.
			C.N.R. Extra Gang, St. Andrews, Que.	1920	Timekeeper.
Baker, Harold E.	Univ. of Tor.	Arts.	Camp B, Rock Bay, B.C.	1918	Logger.
Banting, C. O.	Univ. of Man.	Med.	C.N.R., Carlyle, Sask.	1909	Navvy.
Barlow, H. S.	Univ. of Tor.	Med.	W. W. Murray's Camp, Nairn Centre, Ont.	1920	Axeman.
Baragar, F. D.	Univ. of Man.	Arts.	N.C.R. Const., Bassano, Alta.	1914	Laborer.
Barlow, F. J., B.A.	Univ. of Tor.	Arts.	Shaw's Camp, V.H.L. Co., Pinage Lake, Ont.	1909-10	Cableman.
Barrett, S. H.	Univ. of Tor.	Arts.	Rat Portage Lumber Co., Camp 2, Ingolf, Ont.	1913	Choreboy.
Beaudin, W.	Laval Univ.	Science.	Hydro-Electric Power Com., Queenston, Ont.	1919	Carp.'s helper.
Bell, Fred.	Univ. of Tor.	Med.	Mile 127, MacDonnell & O'Brien, La Tuque, Que.	1914	Navvy.
			C.N.R. Const., Petite Riviere, Q.	1915	Laborer.

Bell, Fred. (*Continued*)			Hudson Bay Const. Co., The Pas, Man.	1916	Brakeman.
			Hudson Bay Const. Co., Mile 256.	1917	Brakeman.
			O'Brien & Doheny, Cap Tourmente, Que.	1918	Brakeman.
Bennett, R. C.	Victoria Coll.	Arts.	Mile 134, Joco Creek, T.C.R., La Tuque, Que.	1914	Laborer.
Berry, F. R.	Trinity Coll.	Arts.	G.T.R. Extra Gang, Clarksons, Ont.	1920	Laborer.
Bethune, J. H.	Univ. of Tor.	Med.	Martin's Camp, V. H. Lbr. Co., Pinage Lake, Ont.	1911	Axeman.
Bickell, John P.	St. And. Coll. and Un. of T.		Rat Portage Lbr. Co., Lake of the Woods, Ont.	1903-04	Axeman.
Birrell, R. G., B.A.	Univ. of Tor.	Arts.	Hydro-Electric Power Commission, Cameron Falls, Ont.	1919	Clerk.
Black, Steele	Tchr's Certif.		N. N. Wright & Co., Cartier, Algoma, Ont.	1902-03	Trail cutter.
Blampin, W. B., M.A.,	McGill. Univ.		Whalen Pulp Mills, Swanson Bay, B.C. [Part season]	1920	Millworker.
Bradwin, E. W., M.A. '14.	Queen's Univ.	Arts.	Conger Co.'s Lumber Camp, Parry Sound, Ont.	1903-04	Swamper.
			White River Crossing and T. & N.O. Ry. Camps.	1904-06	Concrete work & navvy.
			Various Mining, Lumbering and Construction Camps.	1906-11	Navvy, packer & builder of log camp schools.
			Since 1911 Camp School Insp't'r.		
Brill, O. J., B.A.	Univ. of Chic.	Arts.	Merrill and Ring, Pysht, Wash., U.S.A.	1918	Timekeeper.
			Lumber Company, Big River, Sask [Part season]	1919	Timekeeper.
Brink, A. H.	Alberta Coll.		C.P.R. Extra Gang No. 9, Wilkie, Sask.	1913	Laborer.
Broatch, Robert, M.A.	Un. of Glasgow	Arts.	Gordon's Camp, Markstay, Ont.	1903-04-05	Trail cutter.
Brocke, G.	Alberta Coll.		G.T.P., Wolf Creek, Alta.	1909	Laborer.
Buckton, T. L.	Univ. of Tor.	Arts.	Playfair & White's Camp, Collins Inlet, Ont.	1902-03	Lumberjack.
Bugden, B. G.	Mt. Allison Un.	Arts.	St. John Valley Ry., McDonald's Camp, Woodstock, N.B.	1913	Laborer.

APPENDIX A—(*Continued*)

INSTRUCTORS	University	Faculty	Location	Year	Work
Burke, John.....	Dalhousie Un..	Med....	Mackintosh and McDonald, Middle Musquodoboit, N.S.....	1914.....	Navvy.
			Dominion Coal Co., Birch Grove, N.S.....	1915-16.....	Handyman.
			Dominion Coal Co., New Aberdeen, N.S.....	1917.....	Time-keeper.
Burns, Harold B.....	Matric.....	.....	C.P.R. Extra Gang, Rosetown, Sask.....	1919.....	Surface gang.
Cairns, C. E.....	Univ. of B.C..	Arts....	Powell River Paper Co., Powell River, B.C.....	1911.....	Handyman.
Campbell, Dr.....	Univ. of Tor..	Med....	Playfair and White, Beaverstone, Ont.....	1903-04.....	Camp Physician.
Carpenter, G. B., B.A.	Univ. of N.B..	Arts....	St. John Valley Ry., Hatfields, York Co., N.B.....	1913.....	Laborer.
			C.P.R. Tunnel, Bear Creek, B.C.	1915.....	Checker.
Carpoff, Fred.....	Alberta Coll...	.....	Marshen's Extra Gang, Netherhill, Sask.....	1916.....	Laborer.
			Peace River Crossing, Alta.....	1917.....	Watchman.
			C.N.R. Gang No. 12, Portage la Prairie, Man.....	1918.....	Navvy.
Carr, A. L.....	Univ. of Alta..	Arts....	G.T.P. Foley, Welch & Stewart, Wolf Creek, Alta.....	1910.....	Teamster.
Carr, O. E.....	Univ. of Tor..	Arts....	G.T.P., Groundhog, Ontario.....	1910.....	Carter & handyman.
			Dome Mine, Porcupine [Part season].....	1911.....	Riveter.
Case, Geo. E.....	Univ. of Tor..	Med....	Columbia River Lbr. Co., Golden, B.C.....	1917.....	Logger.
Chantler, Howard....	Univ. of Tor..	Science.	Camp "B," Rock Bay, B.C....	1920.....	Logger.
Chelew, A. C.....	Victoria Coll..	Arts....	Abitibi Power & Paper Co., Iroquois Falls, Ont.....	1917.....	Night watchman.
Chidley, P. F.....	Univ. of Tor..	Arts....	V.H.L. Co., Fraser's Camp, Pinage Lake, Ont.....Winter of	1913-14.....	Swamper.
Chisholm, Miriam, B.A.,	Acadia Univ.	Arts....	Clarke Bros., Bear River, N.S. [Part season].....	1920.....	Factory hand.
Christiansen, C. F...	Ev. Luth. Sem.	.....	G.T.P. Magfield Birgh Co., Mile 226, B.C.....	1913.....	Choreboy.

Clarke, E. H.	Brandon Coll.	Arts.	Cowan Const. Co., C.N.R., Roblin, Man.	1908	Navvy.
			G.T.P., Maryfield, Sask.	1909	Teamster.
Clark, Harry G.	Univ. of Tor.	Med.	Imperial Oil Co., Dartmouth, N.S.	1917	Timekeeper.
Clark, V. L.	Neb. Wesl. Un.	Arts.	C.P.R. Alberni, Van. Isl., B.C.	1910	Teamster.
			C.P.R. Const., Ogema, Sask.	1912	Laborer.
Clem, Orlie	U. of Chicago.	Arts.	Bates and Rogers, Glacier, B.C.	1916	Brakeman.
Cockerline, Ernest.	Univ. of Tor.	Science.	Abitibi Power & Paper Co., Iroquois Falls, Ont.	1917	Night watchman.
Combe, Chas. V.	Wesley Coll.	Arts.	G.T.P., Melville, Sask.	1908	Laborer.
			Winnipeg H.E.P., Point du Bois.	1909	Concrete worker.
Cook, B. A.	Victoria Coll.	Arts.	Meadow Creek, T. & N.O. Ry., Ontario.	1908	Cableman.
			C.N.P. Const., Callaghan's Camp Walhachin, B.C.	1912	Laborer.
			G.T.P. Marsch, Siems, Carey Smith Co., B.C.	1913	Laborer.
Corcoran, J. E., B.A.	Univ. of Tor.	Arts.	Hollinger Mine, Timmins, Ont.	1911-12	Laboratory.
Crawford, Louis.	U. of Indiana.	Arts.	Vooche's Gang, C.P.R., Bassano, Alta.	1914	Laborer.
Crewson, A. L.	McGill Univ.	Med.	C.N.R. Extra Gang No. 15, Mestatim, Sask.	1920	Timekeeper.
Crewson, W. L.	McGill Univ.	Med.	C.N.R. Extra Gang No. 13, Swan River, Man. [Part Season]	1920	Laborer.
Croft, Thos.	McGill Univ.	Arts.	C.P.R., Alberni, Vancouver Isld., B.C.	1910	Teamster.
Cruikshank, M.	Teach. Certif.		M. Musquodoboit Valley Ry., Musq. Harbor, N.S.	1913	Navvy.
			Fraser Lbr. Co., Riley Brook, Victoria Co., N.B.	1913	Swamper.
Cummings, A. S.	Univ. of Alta.	Arts.	G.T.P. Mile 1, B.C. West of Edson, Alta.	1911	Navvy.
Davidson, A. T.	Univ. of Tor.	Forestry	Foley Bros. Const. Co., Bear Creek, B.C.	1914	Checker.
Davidson, J. F.	Trinity Coll.	Arts.	Hydro-Electric Power Commission Camp No. 33, Niagara Falls, Ont.	1919	Carp'tr's helper.
Davidson, W. A.	Victoria Coll.	Arts.	G.T.P. Fauquier's Camp No. 31.	1909	Clerk.
Davies, Norman, B.A.	McMast. Un.	Arts.	T.C.R., F. Munro & Co., White Shore Lake, Que.	1913	Navvy.
Davies, R. S. E.	Christ College, Llandovery, Wales	Arts	Abitibi Power & Paper Co., Iroquois Falls, Ont.	1917-20	Clerk.

APPENDIX A—(*Continued*)

Instructors	University	Faculty	Location	Year	Work
Dearle, R. C..... B.A. '14—Ph.D. '19	Univ. of Tor..	Arts....	Hartley's Camp, V. H. L. Co., Pinage Lake, Ont.....	1910.....	Beaver.
			G.T.P., Leonard Lake, Ont.....	1911.....	Choreboy.
			C.N.R. Const. Camp Mile No. 176, Missanabie, Ont.....	1912.....	Laborer.
			G.T.P. Const. 60 miles E. of Cochrane, Ont.....	1913.....	Watchman.
			Fraser Bros. Lbr. Co., Plaster Rock, N.B.....	1918.....	Movie operator.
			Eastern Inspector Frontier College, 1919.		
Dedman, W. J.....	Univ. of Tor..	Med....	C.N.R.,Sellwood,Ont.[P't Season]	1909.....	Rockwork.
Diamond, Wm.. M,A.	Wesley Coll... and Univ. of Chicago.	Arts....	Northern Fish Co., Lake Winnipeg, Man.....	1910.....	Fish packer.
			Northern Fish Co., Lake Winnipeg, Man.....	1915-16-17-18	Fish sorter.
Dinniwell, R.....	Univ. of Tor..	Dents .	Clark Bros. Pulp Mill, Bear River, N.S.....	1920.....	Carpenter
Dobson, Geo. C., B.A.	Toronto.....	Arts....	Canadian Dredging Co., Allanburg, Ont.....	1916.....	Deck hand.
Dobson, H. V., B.A..	Univ. of Tor..	Med....	W. T. Parson's Camp No. 1, Twohy Bros., Kamloops, B.C..	1914.....	Navvy.
			Fraser Lumber Co., Plaster Rock, N.B.....	1917.....	General work.
			Cheneaux Boom, via Castleford, Ont.....	1918.....	Log sorter.
Donaldson, A. G.....	McMaster Un.	Arts....	C.N.R. Extra Gang No. 407, Perth Road, Ont.....	1920.....	Laborer.
Doolittle, Gordon....	Victoria Coll..	Arts....	G.T.P., O'Brien, McDougall & O'Gorman, Twin Lakes, Ont...	1913.....	Pumpman.
			O'Brien, McDougall & O'Gorman Const., Hearst, Ont.....	1914.....	Choreboy.
Douglas, Gordon....	Univ. of Alta..	Med...	Excelsior Lumber Co., Jarvie, Alta.....	1920.....	Slab-cutter.
Dorrance, R. L., B.A.	Univ. of Tor..	Arts....	Foley Bros. Const. Camp, Bear Creek, B.C.....	1914.....	Checker.
Eby, W. H.....	Victoria Coll..	Arts....	Larder Lake, Ont.....	1908.....	Roadmaker.
			G.T.P., Foley, Welch & Stewart, B.C.....	1909.....	Choreboy.

Edwards, J. W.	McMaster Un.	Arts.	G.T.P., Herron Bros., Skunk River, Ont.	1911	Trestleman.
			T. & N.O. Const., Montreal River Crossing, Ont.	1912	Concrete work.
Elliott, G.	O.A.C.	Agric.	Frederickhouse, Ontario	1913	Laborer and Settlement tchr.
Elliott, G. H.	Wesley Coll.	Arts.	G.T.P. Const., Vermillion Bay, Ont.	1908	Navvy.
			G.T.P. Const., Kashabowie, Ont.	1909	Navvy.
Ellis, Douglas, M.A.	Queen's Univ.	Science.	Cobalt, Ont.	1907	Mining.
Evans, W. D.	Univ. of Tor.	Arts.	Algoma Central Ry., Mile 63, via Hobon, Ont.	1913	Night watchman.
Ewart, E. W.	Univ. of Tor.	Arts.	Camp B, Rock Bay, B.C.	1917	Logger.
Eynon, C. M.	Queen's Univ.	Arts.	C.N.R. Camp No. 305, Albany Forks Pit, Hornepayne, Ont.	1919	Laborer.
Fallis, M. P.	Univ. of Tor.	Arts.,	Dominion Coal Co., Colliery No. 14, New Waterford, N.S.	1913	Miner.
Farmer, Colin	McMaster Un.	Arts.	Rat Portage Lumber Co., Menzies Bay, B.C.	1920	Logger.
Farquharson, C. D., M.A.	Univ. of Tor	Arts.	G.T.P. Abitibi Crossing, Ont.	1909	Abutment work.
Farquharson, Ray	Univ. of Tor.	Med.	Hydro-Electric Power Commission, Forebay Camp, Queenston, Ont.	1919	Carp'tr's helper.
			C.N.R. Floating Gang, Fort Rouge, Winnipeg, Man.	1920	Laborer.
Fasken, S. A.	Univ. of Tor.	Arts.	Fraser's Camp, V. H. L. Co., Pinage Lake, Ont.	1912	Swamper.
			C.P.R., Montalbetti's Camp, Viceroy, Sask.	1913	Laborer.
			Hudson Bay Const. Co., Mile No. 109, Le Pas, Man.	1914	Brakeman.
			Hamilton Logging Co., Hamilton, Wash., U.S.A.	1915	Logger.
			224th Can. Forestry Batt., Scotland.	1917	Woodsman.
Fawns, W. S, M.B.	Univ. of Tor.	Med.	Rathbun Lbr. Co.	1903-04	Camp Physician.
Ferguson, J. P., B.A.	Univ. of Tor.	Arts.	Cowan Const. Co., Kindersley, Sask.	1915	Laborer.
			C.N.R. Extra Gang, Pinkham, Sask. [Part season]	1916	Laborer.
Finkelstein, Manley.	Univ. of Man.	Arts.	Division 34, G.W.W.D., Winnipeg, Man.	1918	Clerk.

APPENDIX A—(*Continued*)

Instructors	University	Faculty	Location	Year	Work
Fisher, C. A.	Mt. Allison U.	Arts.	Camp 10, Mile 87, G.W.W.D., Winnipeg, Man.	1918	Cement worker.
Flook, F. R.	Victoria Coll.	Arts.	Mile 340, Munro's Camp, via La Tuque, Que.	1914	Navvy.
Fraser, Donald J.	Queen's Univ.	Arts.	C.N.R., Sask.	1904-05	Laborer.
Free, H. B.	Queen's Univ.	Arts.	C.P.R., Cook Const. Co., Phelan's Pit.	1913	Craneman.
Fries, Erik B.	Harvard Univ.	Arts.	Roberts Lake Camp, Rock Bay, B.C.	1918	Logger.
Gardner, Douglas B.	Univ. of Tor.	Science.	Tough Oaks Mine, Kirkland Lake, Ont.	1915	Handyman.
Garratt, Thos.	School Tchr.		Geo. Gordon Lbr. Co., Camp 1, River Valley, Ont.	1913	Woodsman.
			C.P.R. Const., Glacier, B.C.	1914	Watchman.
Gartung, S.	Waterloo Sem.		O'Brien Mine, Miller Lake, Gowganda, Ont.	1918	Cookee, also taught children during day.
Gauld, J. G.	Univ. of Tor.	Arts.	C.P.R., Lauder, Man	1913	Navvy.
Gibson, D. G.	Univ. of Tor.	Arts.	C.P.R. near Regina, Sask.	1919	Laborer.
Gillespie, R. J.	Teachr's Cert.		Morgan's Camp, Rock Bay, B.C.	1916	Signalman.
Gilley, E. R.	Columb. Coll.	Arts.	C.N.P. Const., Camp 50, Koenigs B.C.	1912	Quarryman.
			Gillies Bros., Pitt River, B.C.	1913	Laborer.
Gillies, J. J.	School Tchr.		McFadden's Camp, Whitefish, Ont.	1904-05	Swamper.
Gillies, J. R.	Columb. Coll.	Arts.	C.N.P. Const., Camp 44, Koenigs B.C.	1912	Laborer.
Gillies, J. Z.	Univ. of Tor.	Arts.	G.T.P. Gravel Pit, Mile 111, west of Cochrane.	1910.	Choreboy.
			C.N.P. Const., Camp 71, Twohy Bros., Kamloops, B.C.	1912	Laborer.
Givens, W. E., B.A.,	U. of Indiana & Colum. Univ.	Arts.	C.P.R. Const., Monitor, Alta.	1914	Tie bucker.
Gordon, W. P.	Tchr's Certif.		Canadian Copper Co., Creighton Mine, Ont.	1918	Miner.

Graham, N. F.	Univ. of Alta.	Arts.	G.T.P. Extra Gang No. 4, McBride, B.C.	1913	Clerk.
			Road Dept., G.T.R., Edson, Alta.	1914	Clerk.
			G.T.P. Const., Mile 92, Pocahontas, Alta.	1915	Clerk.
Graham, R. P.	Wycliffe Coll.	Arts.	C.P.R. Camp 1, Brooks, Alta.	1913	Laborer.
			Brazeau Collieries Co., Nordegg, Alta.	1914	Laborer.
Grant, C. C., B.A.,	Univ. of Tor.	Arts.	Dominion Coal Co., New Aberdeen, N.S.	1914	Miner.
Grant, E. W.			Abitibi Power & Paper Co., Iroquois Falls, Ont. [Part season]	1919	Interpreter.
Grant, Neal	Univ. of Alta.	Arts.	G.T.P., Swanson's Camp, west of Edson, Alta.	1911	Teamster.
Gray, Angus	School Tchr.		E. Hall's Camp, 12 miles from Nairn Centre, Ont.	1902-03	Lumberjack.
Gray, E. D.	McMaster Un.	Arts.	T. & N.O.Const., Regan's Camp.	1908	Straw-boss.
			T. & N.O. Const., Roundhouse, Cochrane, Ont. [Part season]	1909	Sub-foreman.
Gray, J. E., B.A.	Univ. of Tor.	Arts.	C.P.R., Talbot's Gang, Assiniboia, Sask.	1913	Laborer.
Gray, J., B.A.	Queen's Univ.	Arts.	Geo. Gordon & Co.'s Camp, Markstay, Ont.	1904	Trail cutter.
Greenslade, S. H.	Univ. of Tor.	Arts.	Algoma Central Ry., Mile 46, via Hobon, Ont.	1913	Choreboy.
Griffith, J. E.	Victoria Coll.	Arts.	G.T.P. Const., Camp 2, Northern Quebec.	1912	Blacksmith.
			Foley Const. Co., C.N.R. Mile 140, Makwa, Ont.	1913	Blacksmith.
Griffin, W. E.	Wesley Coll.	Arts.	Rat Portage Lbr. Co., Kenora, Ont.	1911	Laborer.
Groat, M. E.	McMaster Un.	Arts.	Coal Creek, via Fernie, B.C.	1920	Coal miner.
Gryte, Lewis	O.A.C.	Agric.	Camp 10, Mile 83½, G.W.W.D., Winnipeg, Man.	1918	Laborer.
Hall, A.	McMaster Un.	Arts.	G.T.P. Pit 3, O'Brien's Const., Cochrane, Ont.	1912	Navvy.
Hare, Chas., M.D.	Trinity Coll.		Playfair & White, Beaverstone, Ont.	1903-04	Camp physician.
Harkness, L. C.	McMaster Un.	Arts.	G.T.P. Const., Touchwood Hills, Sask.	1907	Laborer.
Harper, Herman	Univ. of N.B.	Arts.	Davison Lbr. Co., Hastings, N.S.	1915	Laborer.
Haverstock, L. S.	McMaster Un.	Arts.	C.P.R. Const., Fort Steele, B.C.	1912	Laborer.

APPENDIX A—(*Continued*)

Instructors	University	Faculty	Location	Year	Work
Henderson, H.	Matric.		Playfair & White, Bahnsen Siding, Ont	1907-08	Choreboy.
Henry, Lorne J.	Victoria Coll.	Arts.	C.N.P. Const., Headquarters Camp, B.C.	1915	Laborer.
Henry, W. E.	Univ. of Tor.	Arts.	Parson's Camp No. 2, Twohy Bros., Kamloops, B.C.	1914	Laborer.
Henry, W. O.	Univ. of Tor.	Arts.	G.T.P., Kapuskasing River, Ont.	1910	Carter.
Heslip, M. W.	Westm. Hall.	Arts.	C.N.R., Johnson's Camp, Vancouver Island, B.C.	1911	Laborer.
Hicks, W. J.	Univ. of Tor.	Arts.	Broken Home Camp, T. & N.O. Ry., Ont.	1908	Clerk.
Higgins, R.	Royal Univ. of Ireland, Queen's Coll., Cork	Arts.	McDougall Chutes	1907	Navvy.
Hindle, Thomas	McMaster Un.	Arts.	Touchwood Hills, Sask.	1907	Teamster.
Hitchcock, R. F.	Framlingham Coll., England.		Robinson's Camp, V.H.L.C. Pinage Lake, Ont.	1912	Swamper.
Holmes, Alfred	Wycliffe Coll.	Arts.	Cook Constr. Co., Windy Lake, Ont	1914	Navvy.
Howard, Bert	Wesley Coll.	Arts.	C.P.R., Bassano, Alta.	1914	Laborer.
Hooper, J. H., B.Sc.	McGill Univ.	Science.	Dom. Govt. Camp, Spirit Lake, Que.	1915-16-17	Guard.
Howitt, J. R.	Univ. of Tor.	Arts.	G.T.P., Mile 233, via Fort George B.C.	1913	Navvy.
Howitt, M. H.	Univ. of Tor.	Science.	G.T.P., Mile 232, via Fort George, B.C.	1913	Laborer.
Hukins, R.	Victoria Coll.	Arts.	C.N.R. Steel Gang 22, Saskatoon, Sask.	1920	Laborer.
Humphries, Kenneth.	Tchr's Certif.		Excelsior Lumber Co., Flat Bush, Alta.	1918	Swamper.
Jackson, L. C.	Victoria Coll.	Arts.	Lindhag's Gang, C.P.R., McLeod, Alta.	1920	Navvy
Jamieson, W. G.	Univ. of Tor.	Med.	Sim's Pit, C.P.R., Broadview, Sask.	1915	Handyman.

Jeffrey, Geo. S.	Univ. of Tor.	Med.	Mile 202, E.D. & B.C. Ry., Edmonton, Alta	1915	Laborer.
Johnson, F. B.	McGill Univ.	Arts.	Chapeau, Quebec	1918	Sorter.
			Canada Cement Co., Tuxedo, Man	1919	Supply Dept.
			G.T.R. Extra Gang, Niagara Falls, Ont	1920	Laborer.
Jones, J. W.	Wycliffe Coll.	Arts.	Cap Tormentine, N.B.	1915	Laborer.
Jones, C. D., M.A.	McMaster Un.	Arts.	T. & N.O. Construction [Part season]	1908	Laborer.
Jordan, J. Coleman.	Mt. Allison U.	Arts.	Davison Lbr. Co., Springfield, N.S. [Part season]	1916	Laborer.
Keeley, A. J.	Tchr's Certif.		T. & N.O. Ry.	1905-06	Car knocker.
Keeley, Dan.	Queen's Univ.	Sch. of Mines	Cassidy's Pit and Boston Creek, T. & N.O. Ry.	1906	Car knocker.
			New Liskeard, Ont.	1907	Supervisor.
Keeley, Frank.	Queen's Univ.	Med.	J. R. Booth's Camp, Cache Bay, Ont	1902-03	Swamper.
			T. & N.O. Ry. Const.	1904-05	Car knocker.
Kemp, Douglas.	Univ. of Tor.	Med.	Castleford, Ont.	1919	Log sorter.
Kemp, Melburn.	Univ. of Tor.	Med.	Operating Camp, Rock Bay, B.C.	1916	Logger.
			Camp 7, G.W.W.D., Winnipeg, Man	1917	Pumpman.
Kester, O. Dean.			Camp 3, Eastern Lands, C.N.R., Foleyet, Ont	1918	Timekeeper.
Keyfitz, Isador.	Univ. of Tor.	Arts.	Extra Gang No. 1, A.G.W., Edmonton, Alta	1918	Cookee.
			Monarch Mine, Drumheller, Alta.	1918	Coal sorter.
Kidd, C. B.	Queen's Univ.	Arts.	T. & N.O., Porcupine Extension, Frederickhouse, Ont.	1911	Timekeeper.
King, R. B.	Harvard Univ.	Arts.	Merrill and Ring, Pysht, Wash., U.S.A.	1919	Logger.
Kirkpatrick, J., B.A.	McMaster Un.	Arts.	Parry Sound Lumber Co., Orrville, Ont.	1903-04	Swamper.
Kneeland, S. F., B.A.	McGill Univ.	Arts.	G.T.P., 7 Foley's Construction, Northern Quebec.	1912	Gravel pit.
Knox, H. C., B.A.	Queen's Univ. & Univ. of Wis.	Arts.	C.P.R. Extra Work, Hardisty, Alta	1920	Navvy
Lacey, A.	Victoria Coll.	Arts.	Inland Const. Co., Hydro Glen, Ont	1916	Cement work.
Lane, D. Austin.	Victoria Coll.	Arts.	Mile 139, H. B. Ry., Le Pas, Man.	1915	Navvy.

APPENDIX A—(*Continued*)

INSTRUCTORS	University	Faculty	Location	Year	Work
Lapp, V. R.....	McGill Univ..	Med...	G.T.P. Pit 2, Mile No. 153, west of Cochrane, Ont.....	1912.....	Timekeeper.
			Construction Pit 5, via Hearst, Ont.....	1914.....	Clerk.
			North Fraser Lbr. Co., Dome, B.C.....	1919.....	Mill-man.
Laverie, Miss B. M..	Tchr's Certif..	.....	Murdoch Bros., 50 miles from North Bay, Ont., on T. & N.O.	1903.....	Teacher.
Laurie, W. J.....	Univ. of Tor..	Med....	C.N.O.R. Const., Stewart & Son, Chapleau, Ont.....	1912.....	Teamster.
Law, E. G.....	Wesley Coll...	Arts....	Rainy River Lbr. Co., Matthew Siding, Ont.....	1910.....	Lumberjack.
			C.P.R. Steel Gang, Iricana, Alta..	1911.....	Laborer.
			C.P.R. Const., Standard, Alta....	1912.....	Foreman.
Lawry, W. C.....	McGill Univ..	Arts....	C.P.R. Const., Wilkie, Sask....	1912.....	Laborer.
Leavens, H. K.....	Tchr's Certif..	.....	J. J. McFadden's Camp, Whitefish, Ont.....	1902.....	Lumberjack.
			North Bay, Ont.....	1903.....	Lumberjack.
LeGrow, P. A.....	Mt. Allison U..	Arts....	St. John Valley Ry., Woodstock, N.B.....	1913.....	Laborer.
Lemieux, Arsene.....	Laval Univ....	Arts....	G.T.P., Fauquier, Ont. [Part sea'n]	1910.....	Choreboy.
Lett, Sherwood.....	McGill Univ.. [B.C.]	Arts....	Camp 99, Moore & Pethick, Cowichan Lake, B.C.....	1914.....	Grader.
Lewis, E. P.....	McMaster Un.	Arts....	G.T.P. Const., Touchwood Hills, Sask.....	1907.....	Laborer.
Locke, W. C.....	Wycliffe Coll..	Arts....	C.N.R. Const., Brock, Sask.....	1915.....	Laborer.
Long, John A.....	McMaster Un.	Arts....	Northern Const. Co., steel gang..	1914.....	Navvy.
Longmore, C. G. D..	McMaster Un.	Arts....	Shaw's Camp, V. H. L. Co., Pinage Lake, Ont.....	1911.....	Swamper.
			C.N.O. Const., Ruel, Ont.....	1912.....	Laborer.
			C.N.R. Const., Nipigon, Ont....	1913.....	Laborer.
			Inland Construction Co., Severn Falls, Ont.....	1914-15.....	Carptr's helper.
			Canadian Dredging Co., Dredge "Primrose," Thorold, Ont....	1916.....	Deck-hand.
			O'Brien and Doheny, Q. and S. Ry., Cap Tourmente, Quebec..	1916.....	Laborer.

Longmore, C. G. D. (*Continued*)			Abitibi Power and Paper Co., Iroquois Falls, Ont.	1917-18	Swamper.
			Dominion Coal Co., Colliery No. 22, Birch Grove, N.S. [Part season]	1918	Laborer.
			Hydro-Electric Power Commission, Whirlpool Camp, Niagara Falls, Ont.	1919-20	Teacher.
Lord, J. D	Alberta Coll.		C.P.R., Kipp, Alta.	1910	Laborer.
Love, Hubert B.	Queen's Univ.	Arts.	Smooth Rock Falls, Ont.	1916	Laborer.
Lowry, R. H.			Gold Rock, Ont.	1902-03	Miner.
Luxton, G. N.	Trinity Coll.	Arts.	G.T.R. Extra Gang, Bridgeburg, Ont.	1920	Navvy.
Lye, O. G.	Univ. of Tor.	Arts.	G.T.P., Hamar's Headquarters, Missanabie River, Ont. [Part season]	1911	Choreboy and brakeman.
Lyons, R. W.	Univ. of Tor.	Forestry	E.D. & B.C. Ry., Mirror Landing, Alta.	1914	Laborer.
			Hastings Lumber Co., Rock Bay, B.C.	1915	Logger.
Mackey, Miss M. I., M.A.	Univ. of Tor		Stalwart, Sask.	1920	Educational and Welfare Worker
Mackenzie, Angus A.	Univ. of Tor.	Arts.	Fraser Lbr. Co., Plaster Rock, N.B.	1916	Educational welfare.
			Munition Works, Dragon, Que.	1917	Munition wrkr.
MacKenzie, C.S., B.A.	McGill Univ		Fraser Lbr. Co., Plaster Rock, N.B.	1914	Educational and welfare.
MacKenzie, J.W., B.A.	McGill Univ		G.T.P. Construction, Siems Cary Co., Mile 164 West, B.C.	1913	Navvy.
			C.P.R. Construction, Broadview, Sask.	1914	Navvy.
Mackersie, Will.	Univ. of Tor.	Med.	Toronto-Hamilton Highway, Camp 4, Ont.	1915	Laborer.
MacKinlay, R.	Univ. of Tor.	Med.	Upper Fraser River Lbr. Co., Mile 141, B.C.	1913	Saw-mill hand.
			H.B. Ry. Const., Limestone River Hospital, Man.	1915	Physician's Asst.
Macklin, W.	Univ. of Tor.	S.P.S.	C.P.R. Extra Gang, Abernethy, Sask.	1920	Trestle work.

APPENDIX A—(*Continued*)

Instructors	University	Faculty	Location	Year	Work
MacLean, A.	Westm. Hall		Powell River Paper Co., Powell River, B.C.	1910	Laborer.
MacQuarrie, A. H.			C.N.P., Twohy Bros., Hdqtrs. Camp 83, Vavenby, B.C.	1913	Grader.
Magee, E.	Victoria Coll.		Busteads Camp, Mile 201, Oba, via Franz, Ont.	1914	Blacksm's hlpr.
Manning, H. K.	Victoria Coll.	Arts.	Kaministiquia, Ont	1907	Laborer.
Marshall, Robert	Univ. of Tor.		Sheridan's Shanty, Maynooth.	1903-04	Lumberjack.
McAndless, L. G.	Victoria Coll.	Arts.	C.N.P. Const., Camp 2, Twohy Bros., Ashcroft, B.C.	1912	Grader.
McCallum, Duncan	Univ. of Tor.	Med.	Hudson Bay Const. Co., The Pas, Man.	1915-16	Laborer.
McCallum, Robt.	Brandon Coll.	Arts.	Geo. Gordon Lbr. Co., Markstay, Ont.	1907-08	Lumberjack.
			C.P.R. Const., Penzance, Sask.	1912	Laborer.
McCarty, Clinton			Abitibi Pulp Co., Camp 22, Iroquois Falls, Ont.	1919	Lumberjack.
McClelland, John			Georgian Bay Lbr. Co., Bala, Ont.	1912	Swamper.
McClintock, J. J.	Univ. of Tor.	Med.	W. A. Co., Shoal Lake, Winnipeg, Man.	1916	Pumpman.
			G.W.W.D., Camp 3, Shoal Lake, Winnipeg, Man.	1917	Laborer.
			Robert's Lake Camp, Rock Bay, B.C.	1919	Logger.
McConnell, A. D.	Queen's Univ.	Med.	Georgian Bay Lbr. Co., Nine Mile Siding, Ont.	1911	Lumberjack.
McCrimmon, J. R.	Manitoba Coll.	Arts.	Canada Cement Co., Tuxedo, Man.	1918	Supply Dept.
McDonald, J. F. M.A.	Queen's Univ.	Arts.	V.H.L. Co.'s Camp near Nairn Centre, Ont.	1902-03	Swamper (cutting season).
McDougall, Chas.	Univ. of Tor.	Med.	Toronto-Hamilton Highway, Aldershot, Ont.	1915	Navvy.
McDougall, D. L.	Teacher		Dominion Coal Co., No. 2 Colliery, New Aberdeen, N.S.	1913	Bratticeman.
			Mond Nickel Co., Levack.	1913-14	Clerk.

McEachern, J., B.A.	Queen's Univ.	Arts.	Crooked River, Sask.	1905.	Timekeeper.
McKague, A. E.	Univ. of Tor.	Arts.	Steam Shovel Gang, C.N.R., Hoburg, Alta.	1920.	Timekeeper.
McKague, W. N.	Univ. of Tor.	Med.	Port Nelson, Dept. Railways & Canals, Ottawa, Ont.	1914.	Laborer.
McKay, D. W.	Columb. Coll.		C.N.P., Camp 19, Nile Creek, Vancouver Island, B.C.	1913.	Laborer.
McKeown, C. J. W.	Univ. of Tor.	Med.	Junkins Co., Kenora, Ont.	1919.	Navvy.
McLachlin, J. L.	Univ. of Tor.	Arts.	C.N.P. Const., Camp 81, Kamloops, B.C.	1912.	Laborer.
McLean, G. C.	Univ. of Tor.	Med.	G.T.R. Extra Gang, Princeton, Ont.	1920.	Laborer.
McLean, R. A., B.A.	Queen's Univ	Arts.	Lipton, Sask.	1905.	Navvy.
McLean, W. C.	Univ. of Tor.	Dent.	C.P.R. Extra Gang, Roblin, Ont.	1920.	Timekeeper.
McIntyre, C. M.	St. John's Coll.	Arts	C.P.R., Dodge's Camp, Sceptre, Sask.	1913.	Laborer.
McMillan, H. E.	Tchr's Certif.		George Gordon Lbr. Co., River Valley, Ont.	1917.	Lumberjack.
			McIntyre Mine, Schumacher, Ont	1918.	Mining.
McQueen, J., M.A.	Univ. of Tor.	Arts.	Shanovan, Sask., C.P.R.	1914.	Laborer.
McWilliams, W. R.	Victoria Coll.	Arts.	G.T.P. Pit 5, Foley's Const., Quebec	1912.	Laborer.
			Abitibi Crossing, Ont.	1913.	Settlmt tchr.
McAvoy, J. R.	Queen's Univ.	Med.	C.N.R. Extra Gang, Belleville	1920.	Navvy.
Menzies, Jas.			Fraser's Camp, V. H. L. Co., Pinage Lake, Ont.	1910.	Choreboy.
			C.P.R., O'Brien's Gang, Bulyea, Sask.	1911.	Laborer.
			G.T.P. Const., Mile 51, B.C., Fitzhugh, Alta.	1912.	Boatman.
Miller, Alfred	Queen's Univ.	Arts.	Owen's Camp 3, Markstay, Ont.	1903.	Lumberjack.
			Parry Sound Lumber Co., Loring, Ont.	1907-08	Lumberjack.
			Supervisor of Camp Outfits	1911-12	
Miller, Fred, B.A.	Queen's Univ.	Arts.	Shannon Co.'s Mills, Prince Albert, Sask.	1903.	Lumberjack.
			Rat Portage Lumber Co., 40 miles from Kenora	1904.	Lumberjack.
			Helen Mine, Algoma, Ont.	1905-06	Miner.
Miller, John, B.A.	Queen's Univ.	Arts.	T. & N.O. Ry., Nipissing, Ont.	1905.	Car knocker.
Miller, Wm. J.	Acadia Univ	Arts.	Clark Bros. Pulp Mill, Bear River, N.S.	1920.	Time clerk.

APPENDIX A—(*Continued*)

Instructors	University	Faculty	Location	Year	Work
Misener, Geo. D.	Alberta Univ.	Arts	G.T.P., Mile 23, Wolf Creek, Alta	1910	Laborer.
Mitchell, E. T.	Alberta Univ.	Arts.	G.T.P., Mileage 23, Wolf Creek, Alta.	1910	Laborer.
			G.T.P., Mile 17, West of Edson, B.C.	1911	Carptr's helper.
Moffatt, W. S.	Univ. of Tor.	Med.	Abitibi Power & Paper Co., Iroquois Falls, Ont.	1916	Watchman.
Moody, Alan K.	Washington	Forestry	Gordon's Camp 3, River Valley, Ont.	1916	Lumberjack.
			Abitibi Power & Paper Co., Iroquois Falls, Ont. [Part season].	1917	Helper.
Moore, A. J.			Parry Sound Co.'s Camp, Seguin Falls, Ont.	1904-05	Lumberjack.
Moore, John G.			Parry Sound Lbr. Co., No. 3, Loring, Ont.	1909	Lumberjack.
			Lovering's Camp, Georgian Bay Lbr. Co., Bala, Ont.	1910	Lumberjack.
			Kelly & Butcher's Camp, Imperial, Sask.	1911	Laborer.
			G.T.P. Const., West of Fitzhugh, Alta.	1912	Navvy.
Moore, Wallace.	Univ. of Tor.	Med.	Steel Gang 22, C.N.R., Prince Albert, Sask.	1919	Laborer.
			Flynn's Gang, C.P.R., Medicine Hat, Alta.	1920	Navvy and clerk.
Morrish, W.	Alberta Coll.		G.T.P. Const., Mile 53, Fitzhugh, Alta.	1912	Clerk.
			G.T.P., Mile 129, B.C., End of Steel West	1913	Clerk.
			G.T.P. End of Steel, West of Edmonton, Alta.	1914	Clerk.
Morison, W. J.	Victoria Coll.	Arts.	C.N.R., Giroux Camp No. 2.	1908	Laborer.
			T. & N.O. Ry., Boston Creek.	1909	Settlemt tchr.
Moote, Jas. H.			Parry Sound Lbr. Co.	1906-07	Lumberjack.
Moyer, F. C.	Victoria Coll.	Arts.	C.P.R., Double Track, Kaministikwia, Ont.	1906-07	Laborer.

Mustard, H. R.....	McGill Univ..	Med...	G.T.P., Camp 219, West of Cochrane, Ont.....	1911.....	Choreboy.
			C.N.P. Const., Camp 1, Murdoch Co., Kamloops, B.C.....	1912.....	Supervisor.
Mustard, W. M.....	Univ. of Tor..	Arts....	H.E.P.C., Whirlpool Camp, Niagara Falls, Ont.....	1920.....	Machinsts hlpr.
Mutchmor, J. R.....	Univ. of Tor..	Arts....	G.T.P., Fauquier, Ont.....	1911.....	Navvy.
			G.T.P. Pit 7, 83 Miles west of Cochrane, Ont.....	1912.....	Choreboy.
			C.N.O., Foley & Northern Const., Makwa, Ont.....	1913.....	Engine hostler.
			Roberts Bros., Nipigon, Ont.....	1914.....	Navvy.
Myers, Frank R., B.Paed.....	.....	.....	V. H. Lbr. Co., Blind River, Ont..	1915.....	Lumberjack.
Nancekivell, H. W... B.A.	Univ. of Tor...	Arts....	Geo. Gordon Lbr. Co., Markstay, Ont.....	1911.....	Lumberjack.
Newell, Frank.....	Univ. of Tor..	Arts....	Abitibi Power & Paper Co., Iroquois Falls, Ont.....	1915.....	Watchman.
Noseworthy, J. W...	Victoria Coll..	Arts....	Port Nelson, Dept. Rys. and Canals, Ottawa, Ont.....	1914.....	Carpenter.
			McIntyre Mine, Schumacher,Ont	1915-16-17..	Carpenter.
			Timmins, Ont.....	1918.....	Carpenter.
Nott, E. D.....	Univ. of Tor..	Arts....	Margach, C.P.R. Double Track..	1907.....	Laborer.
Nourse, R. E.....	Univ. of Tor..	Arts....	C.N.R. Extra Gang, Englefield, Sask.....	1919.....	Laborer.
O'Beirn, W. F.....	Univ. of Tor..	Arts....	C.P.R. Extra Gang, Brandon, Man.....	1920.....	Laborer.
O'Donnell, Bernard..	U. of Tor. and St. M. Coll....	Med...	C.N.R. Extra Gang 309, Octopus, Ont.....	1919.....	Laborer.
O'Neill, John, M.D..	Trinity Univ..	Med....	Rathbun Co.'s Camp, 20 miles from Gilmour.....	1902-03.....	Camp physician.
Ottewell, A. E.....	Univ. of Alta..	Arts....	G.T.P., Mileage 36, Wolfe Creek, Alta.....	1910.....	Teamster.
Parker, A.....	Univ. of Man..	Med...	Mile 64, G.W.W.D., Winnipeg, Man.....	1918.....	Camp physician.
Parry, R. H.....	Alberta Coll...	.....	G.T.P., Siem's Carey Co., Mile 146, End of Steel, B.C.....	1913.....	Navvy.
Patenaude, E., B.A..	Laval Univ...	.....	C.N.R. Extra Gang, Reddit, Ont.	1920.....	Laborer.
Paterson, Andrew.... M.A.	Queen's Univ..	Arts....	E. Hatt's Camp, 6 miles from Nairn Centre, Ont.....	1902-03.....	Laborer.
Patterson, J. G., B.A.	Dalh. Univ....	Arts....	H.E.P.C., Forebay Camp, Queenston, Ont. [Part season].....	1920.....	Carp'tr's helper.

APPENDIX A—(*Continued*)

Instructors	University	Faculty	Location	Year	Work
Patterson, R. D.....	Univ. of Man.	Arts....	G.T.P., Ingolf, Ont.....	1908.....	Grader.
			G.T.P., Namaka, Alta.....	1909.....	Navvy.
			C.P.R., Macklin, Sask.....	1910.....	Navvy.
			Balmer's Camp, Macklin, Sask...	1911.....	Grader.
Patterson, F. R. C...	Univ. of Tor..	Med....	H.E.P.C., Cameron Falls, Ont...	1920.....	Foreman.
Patterson, G.....	Univ. of Tor..	Arts....	C.N.P., Twohy Bros., Mile 123, Kamloops, B.C.....	1913.....	Grader.
Patton, H. S., M.A..	Univ. of Tor..	Arts....	Fraser's Ltd., Plaster Rock, N.B..	1920.....	Educational work
Pearson,. J. J., B.A..	Victoria Coll..	Arts....	Henderson and Crofts' Camp, C.N.R.....	1909.....	Teamster.
			C.N.R., Parry Sound District, Loring, Ont.....	1910.....	Educational work
Perkins, Wilfred.....	McMaster Un.	Arts....	C.P.R., West of Weyburn, Sask..	1909.....	Grader.
Perry, C. V., B.Sc....	Univ. of Tor..	Science..	C.N.P. Const. Camp 75, Kamloops, B.C.....	1912.....	Handyman.
			T.C.R. Camp, Kekek River, Northern Quebec.....	1913.....	Handyman.
			Beatty & Morrow, Iroquois Falls, Ont.....	1914.....	Handyman.
Pilkington, H.....	Alberta Coll...	.....	G.T.P., Foley, Welch & Stewart, Mile 53, B.C.....	1913.....	Laborer.
Pierce, O. H.....	Tchr's Certif..	.....	V. H. L. Co., Pinage Lake, Ont...	1910.....	Lumberjack.
Playfair, L.....	Univ. of Tor..	Science.	Fraser Lumber Co., Plaster Rock, N.B.....	1919.....	Electrician.
Poole, F. G.....	McMaster Un.	Arts....	G.T.P. Camp, 55 miles east of Cochrane, Ont.....	1911.....	Laborer.
Poole, H. E.....	Brandon Coll..	Arts....	C.P.R., Toby's S.S. Expanse, Sask.....	1913.....	Laborer.
Prendergast, D.....	Univ. of Tor..	Arts....	G.T.P., O'Brien, McDougall & O'Gorman, Hearst, Ont.....	1913.....	Engine hostler.
			Alberta & Great Waterways Ry.,.	1914.....	Laborer.
Pulleyblank W. G...	Univ. of Tor..	Arts....	C.N.O., Foley & North Const. Co., west of Oba, Ont.....	1913.....	Pumpman.
Rankin, W. E.....	Queen's Univ..	Arts....	Canadian Dredging Co., Allenburg, Ont.....	1915.....	Deck hand.
Rattee, C. E.....	Pr. of W. Coll.	.....	Pagano's Camp, Elderbank, N.S..	1914.....	Roadcutter.

Ratz, R. G.	Univ. of Tor.	Med.	Camp H, Rock Bay, B.C.	1917	Logger.
Reid, W. H.	Queen's Univ.	Arts.	H.E.P.C., Whirlpool Camp, Niagara Falls, Ont. [P't season]	1920	Electrician's hlpr.
Rice, L. M.	Victoria Coll.	Arts.	T. & N.O., Patience Gap, Ont.	1908	Laborer.
			Supervisor, B.C.	1909	
Richards, T.	McMaster Un.	Arts.	T. & N.O., Driftwood City, Ont.	1907-08	Harnessmaker.
Richardson, E. A.	Univ. of Tor.	Med.	Deception, C.P.R., Ont.	1907	Laborer.
Rittinger, Fred	Univ. of Tor.	Med.	Camp B, Rock Bay, B.C.	1918	Logger.
Rodgers, L. C.	Columb. Coll.		C.N.P. Const. Co., Camp 75, Duncans, B.C.	1912	Navvy.
			C.N.P., Union Bay, Vancouver Island, B.C.	1913	Navvy.
Ross, D. E.	Univ. of Tor.	Arts	C.P.R. Const., Chaplin, Sask.	1912	Grader.
Roy, U. A.	Queen's Univ.	Arts	C.N.O., Mile 220, Nipigon, Ont.	1913	Choreboy.
Ruston, W. J.	Univ. of Tor.	Arts.	C.N.R., Mile 31, Resplendent, B.C.	1913	Checker.
Rutherford, H. R.	Univ. of Tor.	Arts.	Shewfelt's Camp, V.H.L. Co., Blind River, Ont.	1914	Choreboy.
			C.P.R., Western Division	1914	Timekeeper.
Ryan, R. W., B.A.	Victoria Coll.	Arts.	C.P.R. Const., Tyvan, Sask.	1916	Timekeeper.
			A. E. Griffin Camp 3, Penticton, B.C., Irrigation work	1920	Mechanic.
Rynard, W. M.	Univ. of Tor.	Med.	C.P.R., B. & B. Gang, Lipton, Sask.	1920	Bridgeman.
Sadlier, J. F.	Univ. of Man.	Arts.	Cowan Const. Co., C.N.R., Russell, Man.	1908	Laborer.
St. John, H. F.	Univ. of Tor.	Med.	Steel Gang 25, C.N.R., Prince Albert, Sask.	1919	Navvy.
Salter, F. M.	Dalh. Univ.	Arts.	Dominion Coal Co., New Aberdeen, N.S.	1915	Miner.
Sawden, J. E., M.D.	Trinity Univ.	Med.	Georgian Bay Lbr. Co.	1904-06	Physician and librarian.
Sayles, E. E.	McMaster Un.	Arts.	Steel Camp, T. & N.O. Ry., Ont.	1907	Pumpman.
			G.T.P. Mile 114, West of Edmonton, Alta.	1908	Teamster.
Schreckenberg, F. L.	Ev. Luth. Sem.		C.P.R. Extra Gang 2, Sterling, Alta.	1913	Laborer.
Scott, Mrs. Alex.			J. J. McFadden's Camp, 22 miles from Whitefish	1900-01	Music and Welfare.
Scott, R. C.	Victoria Coll.	Arts.	T. & N.O. Ry., Patience Gap.	1908	Laborer.

APPENDIX A—(*Continued*)

Instructors	University	Faculty	Location	Year	Work
Scott, W. J.	Univ. of Tor.	Arts.	John Tookey, Mile 326, via Harvey Jct., Que.	1914	Laborer.
Sheldon, H. H., M.A.	Queen's Univ. & Univ. of Chic.	Arts.	Merrill & Ring, Pysht, Wash., U.S.A.	1917	Logger.
Shook, A. M.	Tchr's Certif.		Playfair & White, Wahnapitae, Ont.	1909	Choreboy.
Sievenpiper, S. H.	Univ. of Tor.	Med.	Grant's Camp, Spirit River, Alta.	1916	Laborer.
			Britannia Beach, B.C.	1917	Mining.
			Green Lake, Alta Lake P.O., B.C.	1919	Logger.
Simpson, J. G., B.A.	Univ. of Tor.	Arts.	Hastings Sawmill Camp, Rock Bay, B.C.	1919	Logger.
Smith, Fred	McMaster Un.	Arts.	G.T.P. Ry., Touchwood Hills, Sask.	1907	Laborer.
Smith, H. R.	Univ. of Tor.	Arts.	Hudson Bay Const. Co., Reeder Lake, Le Pas, Man.	1914	Laborer.
Smith, G. Napier	Wycliffe Coll.	Arts.	T.C.R. Camp, Mile 344, near La Tuque, Que.	1913	Laborer.
			Fraser Lbr. Co., Plaster Rock, N.B.	1915	General work.
				1916	Supervisor.
Smith, Harry	Univ. of Tor.	Med.	C.N.R. Extra Gang, Fontarabie, Que.	1919	Timekeeper.
Smith, R. G.	Univ. of Tor.	Med.	C.N.R. Extra Gang, Fort Frances, Ont.	1919	Signaller.
			C.P.R. Extra Gang, Markinch, Sask.	1920	Clerk.
Smith, W. R., B.A.	Cornell Univ.	Arts.	McIntyre Mine, Schumacher, Ont	1917	Electrician.
Snook, I. D.	Alberta Coll.		C.P.R., Botha, Alta.	1910	Navvy.
			Sullivan & O'Connor's Camp, C.N.R., Edson, Alta.	1911	Navvy.
Speers, G. C., B.A.	Univ. of Man.	Arts.	G.T.P., Earl, Sask.	1907-08	Navvy.
Spinks, E. J.	Univ. of Tor.	Arts.	C.N.O. Ry. Const., Smith's Camp, Hobon, Ont.	1912	Grader.
Stalker, M. E. J.	Univ. of Tor.	Dent.	C.N.R. Const., St. Eustache, Que.	1915	Clerk.
Staples, W. E., M.A.	Victoria Coll.	Arts.	Paget's Camp, C.N.R., Armstrong, B.C.	1920	Const. Work

Steep, John T.	Univ. of Tor.	Dent.	Camp 1, C.N.R., Foleyet, Ont.	1919	Lumberjack.
			H.E.P.C., Queenston, Ont.	1919	Carp'tr's helper.
			C.N.R., Foleyet, Ont.	1920	Mill hand.
Stewart, A. G.	Univ. of Tor.	Arts.	C.N.R., Eastern Lands Dept., Foleyet, Ont.	1919	Laborer.
Stewart, R. A.	Univ. of Tor.	Med.	M. Caruk's Gang, S. E. Junkins Co., Kenora, Ont.	1919	Laborer.
			C.P.R. Extra Gang, Bassano, Alta	1920	Timekeeper.
Story, H. E. A.	Wesley Coll.	Arts.	G.T.P., Shellmouth, Man.	1909	Laborer.
Sutherland, J. W.	Queen's Univ.	Arts.	Waldie Bros., Blind River, Ont.	1917-18.	Clerk.
Swanson, W. L.	Univ. of Tor.	Arts.	E.D. & B.C. Const., Smoky River, Alta.	1916	Grader.
Swann, H.	Columb. Coll.	Arts	C.N.P., Moore & Pethick, Duncans, B.C.	1913	Navvy.
Sweetman, S.	Univ. of Alta.	Arts	G.T.P., Burns & Jordan, Mile 136, B.C.	1913	Laborer.
Sykes, W.	Alberta Coll.		G.T.P., Siem, Carey Smith Co., Mile 150, B.C.	1913	Grader.
Tedford, Victor	McMaster Un.	Arts.	G.T.P., Construction, Sask.	1907	Grader.
Thompson, Ralph. B.Litt.	Rutgers Coll. U.S.A.		Abitibi Power & Paper Co., Low Bush, Ont.	1916	Timekeeper.
Thorpe, A.	Brandon Coll.		C.P.R., Virden, Man.	1913	Navvy.
Tingley, Arthur.	Acadia Univ.	Arts.	Dom. Coal Co., Birch Grove, N.S.	1920	Carpen'r's helper.
Toupin, J. H., B.A.	Laval Univ.	Arts & Med.	Forebay Camp, H.E.P.C., Niagara Falls, Ont.	1919	Carp'tr's helper.
Treleaven, J. C.	Man. Coll.	Arts	G.T.P., Bates & Rodgers, Mile 142, B.C.	1913	Laborer.
Trembert, Albert.	McMaster Un.	Arts.	C.P.R. Const., Golden, B.C.	1912	Navvy.
Trethewey, W. H.	Victoria Coll.	Arts.	Camp 2, Eastern Lands, C.N.R., Foleyet, Ont.	1919	Lumberjack.
			C.N.R. Extra Gang 9, Edmonton, Alta.	1920	Navvy.
Turnbull, Alex., B.A.	Univ. of Tor.	Arts & Med.	Hudson Bay Const. Co., the Pas, Man.	1914	Laborer.
			Abitibi Pulp & Paper Co., Iroquois Falls, Ont.	1915	Watchman.
Van Wycke, H. B.	Univ. of Tor.	Arts.	T.C.R., McDonnell & O'Brien's Camp, La Tuque, Que.	1913	Laborer.
Vanderburgh, S.	Alberta Coll.		G.T.P., Mile 156, End of Steel B.C.	1913	Laborer.
Walsh, Basil.	Queen's Univ.	Med.	H.E.P.C., Whirlpool Camp, Niagara Falls, Ont.	1919	Car knocker.
			H.E.P.C., Cameron Falls, Ont.	1920	Concrete work.

APPENDIX A—(*Continued*)

Instructors	University	Faculty	Location	Year	Work
Waterman, S.	O.A.C.	Agric.	Frederickhouse, Ont.	1913	Road maker.
Waters, F. W., B.A.	McMaster Un.	Arts.	Pacific Coast Logging Co., Okis Hollo, B.C.	1911	Choreboy.
Waters, H.	McMaster Un.	Arts.	G.T.P., Abitibi Crossing, Ont.	1907	Bridge work.
Way, J. Ian	O.A.C.	Agric.	C.G.R., Grant, Ont.	1916	Asst. machinist.
Wearing, J. P.	Woodst. Coll.		G.T.P. Gravel Pit, 105 miles east of Cochrane, Ont.	1911	Laborer.
Wearing, Joseph, B.A. 1910	McMaster Un.	Arts.	Conger Co.'s Camp, Parry Sound, Ont	1905	Lumberjack.
			Northern Fish Co., Lake Winnipeg, Man.	1906	Laborer.
				1907	Western Inspr.
				1910	Eastern Inspr.
Weaver, S. Roy	McMaster Un.	Arts.	Boston, T. & N.O. Ry.	1906	Choreboy.
Wernei, Arnold A.	O.A.C.	Agric.	H.E.P.C., R.R. 3, Camp 33, Niagara Falls, Ont	1919	Carp'tr's helper.
West, J. H.	McGill Univ.	Med.	G.T.P. Gravel Pit, east of Cochrane, Ont.	1911	Choreboy.
Westaway, W. J., B.A.	Victoria Coll.	Arts.	Rea Mine, South Porcupine, Ont.	1911	Miner.
			G.T.P. Const., Mile 58, Fitzhugh, Alta.	1912	Laborer.
			C.N.O., Herron Bros., Mile 150, Makwa, Ont.	1913	Laborer.
			V.H. Lbr. Co., Whitefish, Ont.	1919	Swamper.
			C.N.R. Extra Gang 105, Torrance, Ont.	1920	Navvy.
Westman, L. E., B.A.	Univ. of Tor.	Arts.	Dominion Coal Co., Birch Grove, N.S.	1914	Miner.
Wheatley, A. C.	Victoria Coll.	Arts.	John Gunn & Sons, St. Louis, Sask.	1914	Laborer.
			Williams Lbr. Co., Connaught, Ont	1915	Lumberjack.
Wickwire, Marjorie	Acadia Univ.	Arts.	Lake Jolly Mills, Clarke Bros., Bear River, N.S. [Part Season]	1920	Factory hand.
Wilcox, A.	Columb. Coll.	Arts.	C.N.P., Cowichan Lake, Vancouver Island, B.C.	1913	Laborer.

Williams, R. J.....	Manitoba Coll.	Arts....	G.T.P., Mile 288, near Fort George B.C.....	1913.....	Laborer.
Willis, Howard, B.Sc..	North. W. Un.	Arts....	Robinson's Camp, V.H.L. Co., Pinage Lake, ...	1911.....	Teamster.
			Valley Ry. Const., Upper Gagetown, N.B.....	1914.....	Laborer.
			Rock Bay, B.C.....	1919.....	Logger.
Wilson, A. R., M.A..	Queen's Univ..	Arts....	Cache Bay, Ont.....	1902.....	Carpenter.
Wilson, A. J.....	Queen's Univ..	Arts....	G.T.P. Const., Mustego,.....	1909.....	Building dump.
Wilson, M. W., B.A..	Univ. of Tor..	Arts....	C.P.R. Const. Extra Gang B, Plenty, Sask.....	1913.....	Laborer.
Windsor, J. E.....	Victoria Coll..	Arts....	Mile 191, Hudson Bay Const. Co., Le Pas, Man.....	1915.....	Laborer.
Windsor, A. S.....	Mt. Allison U.	Arts....	St. John Valley Ry, Meductic, N.B.....	1913.....	Laborer.
Wood, F. Abbott....	Univ. of Tor..	S.P.S...	Merrill & Ring, Everett, Wash., U.S.A.....	1915.....	Logger.
Woriebieff, Nicholas..	Alberta Coll...	.....	Alberta Great Waterways Ry....	1914.....	Laborer.
Wright, J. C.....	Victoria Coll..	Arts....	Willow River Lbr. Co., McBride, B.C.....	1914.....	Logger.
Young, A.....	Victoria Coll..	Arts....	C.N.R., Romford, Ont.....	1906.....	Laborer.
Young, R.....	Univ. of Tor..	Med...	G.T.P., Portage La Prairie, Man.	1906.....	Track-lifter.
Zavitz, C. Harold....	O.A.C.....	Agric...	Inland Const. Co., Severn Falls, Ont.....	1917.....	Laborer.

APPENDIX B.

WHERE THE FRONTIER COLLEGE WORKS.

A Cross-Section of an Average Pulp Camp in Northern Canada

The following table shows the make-up of an ordinary pulp camp—the various races, the coming and going, and yet the considerable proportion who are not only glad to use a reading room, but also the number who become actual pupils in night classes. In my opinion the university should stand for Canadianism of best type in such places. The university owes something to these men, as well as to those in the class room. An instructor in each such camp is one solution.

*The money saved is only a judgment and "Some" means in most cases very little.

Name	Nationality	Languages		Approx. Age	Length of time in Camp	Still in Camp	Used Reading Room	Saved Wages *	Progress of Pupils
		Speaks	Writes						
Peter Seguin	Fr.	Eng. Fr.	—	35	5 mo.	Yes	Slight	Slight	—
Albert Royal	Fr.	Eng. Fr.	English	25	5 mo.	Yes	Slight	No	Slight
Anthoni Chaput	Fr.	Eng. Fr.	—	28	5 mo.	Yes	Much	Yes	Good
I. Rivard	Fr.	Eng. Fr.	—	30	2 mo.	Yes	No	No	—
Jean Brauet	Fr.	French	French	28	2 mo.	No	Some	Yes	Good
John Brauet	Fr.	French	—	30	2 mo.	No	No	Little	—
Geo. Brauet	Fr.	French	—	24	2 mo.	No	Some	Little	Fair
Albert Brauet	Fr.	French	—	20	2 mo.	No	No	No	—
John Wolf	Ger.	Eng. Ger.	Eng. Ger.	19	3 mo.	No	Much	Much	Fair
Roudolph Lausch	Ger.	Eng. Ger.	Eng. Ger.	18	3 mo.	No	Much	Much	Good
Jos. Serois	Fr.	Eng. Fr.	—	52	2 mo.	No	No	Some	—
Jas. Arsenault	Fr.	French	French	32	3 mo.	Yes	No	Much	—
Henrie Boyer	Fr.	Eng. Fr.	French	22	1 mo.	No	Very much	Much	Good
Ovile Milleau	Fr.	Eng. Fr.	—	20	2 mo.	Yes	Much	No	Good
Oschar Marion	Fr.	Eng. Fr.	French	24	2 mo.	Yes	Much	Some	Slight

Claude Marion	Fr.	Eng. Fr.	Eng. Fr.	20	2 mo.	Yes	Much	Some	Slight
Emery Sauriol	Fr.	Eng. Fr.	—	17	2 mo.	Yes	Much	No	—
Germain Sauriol	Fr.	Eng. Fr.	French	24	2 mo.	Yes	Little	No	Slight
Ephrem Germain	Fr.	Eng. Fr.	Eng. Fr.	23	2 mo.	Yes	Very much	Much	Good
Miley Laporte	Fr.	Eng. Fr.	—	17	2 mo.	Yes	Much	Some	Slight
Chas. Laporte	Fr.	Eng. Fr.	—	16	2 mo.	Yes	Much	Some	—
Thos. Lapine	Fr.	Eng. Fr.	—	22	2 mo.	Yes	Some	Some	—
Jos. Lachance	Fr.	Eng. Fr.	—	21	2 mo.	Yes	Some	Some	—
Alberic Boisclair	Fr.	French	—	19	2 mo.	Yes	No	Some	—
Edward Larievere	Fr.	Eng. Fr.	French	28	1 mo.	No	Some	Much	Slight
Jos. Lapine	Fr.	Eng. Fr.	Eng. Fr.	55	1 mo.	No	Very much	Much	—
Harry Enderson	Eng.	English	English	32	1 mo.	No	Much	Some	—
Karl Johnson	Nor.	Eng. Nwg	Nwg.	19	3 mo.	No	Much	Some	Fair
Lewis Benoit	Fr.	Eng. Fr.	—	48	2 mo.	Yes	Some	Some	—
John Sinclair	Eng.	Eng. Fr.	English	50	2 mo.	Yes	Very much	Much	—
John Shaganash	Ind.	Eng. Ind.	—	27	3 wk.	No	No	Yes	—
Robert Possier	Ind.	Eng. Ind.	—	33	1 mo.	Yes	No	Yes	—
Geo. ?	Ind.	Eng. Ind.	—	35	1 mo.	Yes	No	Yes	—
John Chief	Ind.	English	—	40	1 mo.	No	No	No	—
Nuisnic Quismark	Pol.	Eng. Pol.	Polack	38	2 mo.	Yes	Some	Yes	—
Meichel Leiturenczk	Pol.	Eng. Pol.	—	30	2 mo.	Yes	Some	Yes	—
Jos. Luptovich	Pol.	Eng. Pol.	Polack	40	2 mo.	Yes	Some	Yes	—
Geo. Martel	Fr.	Eng. Fr.	—	32	2 mo.	Yes	Much	Slight	—
Geo. Thomas	Eng.	English	English	30	1 mo.	No	Slight	No	—
Arthur Couchon	Fr.	French	—	21	1 mo.	No	No	No	—
Angus McCraig	Fr.	Eng. Fr.	Eng. Fr.	21	1 mo.	No	Some	No	Slight
Magnus Edwardson	Scth.	English	—	19	1 mo.	No	Some	Much	Slight
John Edwardson	Scth.	English	—	30	1 mo.	No	Some	Much	—
Lawrence Edwardson	Scth.	English	—	28	1 mo.	No	—	Much	—
Chas. King	Eng.	English	—	22	1 mo.	No	Some	Some	—
Alberic Boucher	Fr.	French	—	18	2 mo.	No	No	Some	—
Emil Boucher	Fr.	French	—	27	1 mo.	No	No	Some	—

APPENDIX B.—(*Continued.*)

WHERE THE FRONTIER COLLEGE WORKS

A Cross-Section of an Average Pulp Camp in Northern Canada

The following table shows the make-up of an ordinary pulp camp—the various races, the coming and going, and yet the considerable proportion who are not only glad to use a reading room, but also the number who become actual pupils in night classes. In my opinion the university should stand for Canadianism of best type in such places. The university owes something to these men, as well as to those in the class room. An instructor in each such camp is one solution.

*The money saved is only a judgment and "Some" means in most cases very little.

Name	Nationality	Languages		Approx. Age	Length of time in Camp	Still in Camp	Used Reading Room	Saved Wages *	Progress of Pupils
		Speaks	Writes						
Geo. Breton	Fr.	Eng. Fr.	—	23	1 mo.	No	Slight	Some	Fair
Jos. Larievere	Fr.	Eng. Fr.	—	23	3 wk.	No	No	No	—
Eugene Villeneuve	Fr.	Eng. Fr.	—	25	1 mo.	No	Some	Slight	—
Alphonse Dorval	Fr.	French	—	22	2 mo.	Yes	Slight	Yes	—
Leander Dorval	Fr.	French	—	20	2 mo.	Yes	Slight	Yes	—
Jerry Oumont	Fr.	Eng. Fr.	—	55	2 mo.	Yes	Some	Yes	—
Edward Oumont	Fr.	Eng. Fr.	—	23	1 mo.	No	Some	Yes	—
C. Couchon	Fr.	Eng. Fr.	—	57	2 mo.	Yes	No	Some	—
Eugene Gauthier	Fr.	Eng. Fr.	—	54	2 mo.	No	Slight	Some	—
Chas. Bois Vest	Fr.	Eng. Fr.	—	35	1 mo.	No	No	No	—
Felix Gerouix	Fr.	Eng. Fr.	—	28	3 wk.	No	No	No	—
Ernest Leclair	Fr.	Eng. Fr.	—	19	2 mo.	Yes	Some	Some	—
Mandoza Leclair	Fr.	Eng. Fr.	French	21	2 mo.	Yes	Some	Some	—
Ferdine Maron	Fr.	Eng. Fr.	French	20	2 mo.	Yes	Some	Some	
Andrew Beauergard	Fr.	Eng. Fr.	—	25	1 wk.	No.	Some	Some	Slight

Thos. Burns	Fr.	French	French	38	1 mo.	Yes	Some	Some	—
Gustof Swanson	Swd.	Eng. Swd.	Eng. Swd.	40	1 mo.	No	Yes	Much	Slight
Aaron Swanson	Swd.	Eng. Swd.	Swd.	37	1 mo.	No	No	Much	—
A. Anderson	Swd.	Eng. Swd.	Swd.	32	3 wk.	No.	No	Yes	—
Lewis Colsen	Swd.	Eng. Swd.	Swd.	34	3 wk.	No	No	Yes	—
Pierre Derion	Fr.	Eng. Fr.	—	47	1 mo.	No	Yes	Some	—
Pat. McKinnon	Irish	English	English	48	2 mo.	Yes	Slight	Yes	—
D. A. MacMillan	Scth.	English	English	50	1 mo.	No	No	No	—
Nels Gendron	Fr.	Eng. Fr.	—	43	1 mo.	No	No	Some	—
N. Kackaush	Pol.	Polack	—	34	3 wk.	No	No	No	—
Peter Lemay	Fr.	Eng. Fr.	—	40	2 mo.	No	No	No	—
Tim Schanahan	Irish	English	English	24	3 wk.	Yes	Some	Yes	—
A. G. Gage	Eng.	English	English	22	1 wk.	No	Much	Some	Good
Delphis Girard	Fr.	Eng. Fr.	—	26	5 mo.	Yes	Very much	Much	Good
Delphis Perron	Fr.	Eng. Fr.	—	32	2 mo.	Yes	Very much	Much	Good
A. St. Martin	Fr.	Eng. Fr.	French	35	3 mo.	No	No	Much	—
C. Carron	Fr.	Eng. Fr.	French	37	2 mo.	No	No	No	—
Jos. Bourgis	Fr.	Eng. Fr.	—	28	2 mo.	No	No	Some	—
Frank Boyer	Fr.	Eng. Fr.	—	32	3 mo.	No	Very much	V. mch	V. gd.

APPENDIX C

NIGHT SCHOOL IN A LUMBER CAMP

In a bush camp of average size, composed largely of English-speaking men, the camp school conducted there for some months showed the following: The instructor in this case had already taught successfully for five years, in a public school in Ontario, yet it shows what instructor and adult pupils can do, even though busily engaged since early morning at heavy manual work:

Size of camp—58 to 76 men. School started on December 11th, closed March 22nd.

V. Class—Three men, aged 19 to 22. Each of these had passed the entrance. They took up commercial arithmetic and the rudiments of book-keeping.

IV. Class—Five men, aged 20 to 42. Spent their evenings on arithmetic covered by Jr. IV. Class. Fractions, measurement of bark-piles, logs and lumber.

II. Class—Six men, aged 14 to 35. Review of tables, multiplication and division.

I. Class—One Indian, one Frenchman. The Indian of 25 had had no schooling whatever. He covered the work that First Book pupils would take in six months. This man never missed a night, and was most assiduous in his efforts to take advantage of the school. The

Frenchman, 19, had a good common education. He spent his time on English grammar, spelling, and reading of English.

Classes started each evening at 7.30 and closed at 9 o'clock, the last half-hour being given to a general class on any one of the following: 1. Reading of literary selections. 2. Geography of the Empire. 3. Current events from papers. 4. Simple experiments in physics or chemistry. 5. Physiology.

Besides those who were regular pupils practically all used the school for writing of letters and reading. Two of those who were attending classes were offered teams to drive, with more pay in consequence; this they refused, that they might have their evenings free for their schooling. One of the fifth class of that school wrote some months later to find out in which camps the Frontier College would place instructors for the ensuing winter, stating that he would by all means go where he could continue the classes.

APPENDIX D

NIGHT SCHOOL IN A RAILWAY CONSTRUCTION CAMP

Few frontier works of any kind are now composed only of English-speaking or French-speaking men. Foreign-born of one nationality or another constitute to-day the big proportion of bunkhouse men. The following gives in brief what was attempted for a summer by a camp instructor at a railway construction camp. The men were English, French, and foreign-born. It is an attempt which is interesting particularly in relation to the foreign-born as pupils.

A reading room was operated and a night school conducted. Five daily papers were received (1 French), 3 weeklies (one an illustrated weekly), 8 monthly magazines, 2 French papers.

School started May 23rd; closed Sept. 5th.

In June there were enrolled: 5 Italians, 4 Chinamen, 1 Frenchman learning English; 1 Englishman learning French.

In July: 13 Italians, 4 Chinamen (3 left the camp on July 7th), 1 Pole learning English; 1 Englishman learning French.

In August: 8 Italians, 2 Rumanians, 4 Poles, learning English.

In September: 9 Italians, 2 Poles, learning English.

Considering their long hours, and the lateness of the work train at nights, their attendance was creditable. They desired to learn English even at a sacrifice to themselves, and were constant in their efforts to attend school. Perhaps their motive was quite commercial—to obtain better jobs and more pay—but does nothing of the utilitarian actuate the Canadian, too, who would acquire a foreign tongue? Here we have men, who have already spent a long day of ten or twelve hours at heavy toil, seeking night after night to acquire, through the aid of an instructor, a knowledge of our language.